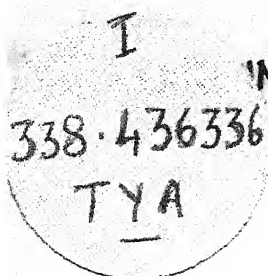
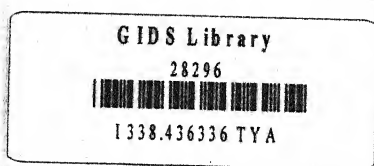


Government Policies and Crisis in Sugar Industry : Evidences from U.P.

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**GOVERNMENT POLICIES AND CRISIS IN
SUGAR INDUSTRY : EVIDENCES FROM U.P.**



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PREFACE

Indian sugar industry is working under the effective control of the Government, since April 1942. The sugar policy framed by the Government, is an instrument to regulate production, distribution, price, export and import of the sugar. The real success of the sugar policy can be judged in the terms of : (a) the sugar policy must allow sugar to be available to the consumers at a reasonably low price; (b) the policy must protect the interest of sugar manufacturers and khandsari producers; (c) it must afford a reasonable rate of return, both to the sugar producers and cane growers; (d) after satisfying internal demand, sugar should be exported to other countries and import policy of sugar should be so balanced that imported sugar should not harm the internal industry. In this context, this study intend to analyse the present crisis in the sugar industry and to suggest alternative policy framework.

We have received guidance and help from a number of persons during the course of study. We express our profound obligation and gratitude to Prof. G.P. Mishra, Director, Giri Institute of Development Studies, Lucknow, who not only provided funding support but also spared his valuable time to guide us. We also received support from the officials of Cane Commissioner's Office, Lucknow. In particular, we feel

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CHAPTER I

INTRODUCTION

Sugar Industry is one of the largest organised industries in India. This industry has a great significance which can not be devalued in its relation to agricultural and industrial economy of the rural region of the country. 35 million farmers and their families besides large mass of agricultural labourers are involved in sugarcane cultivation and its harvesting operation. Over 4 lakh workmen are directly employed. Employment is also generated in various ancilliary activities. The industry thus caters to over 7.5 per cent of our rural population. It is an industry which affects agriculture fundamentally. Therefore, the expansion of sugar industry in India is an indispensable factor for the upliftment of socio-economic life of the country.

India has been known as the original home of sugar and sugarcane. Indian mythology supports this view as it contains some legends showing the origin of sugarcane. The growth of sugar industry is full of tales of adventure and conquest. It received attention of the builders of different Empires and Governments from time to time. During the colonial rule this industry was promoted with a view to commercializing agriculture so that the peripheral area would be linked with the urban market through money-commodity relations. Hence, the limited purpose to promote sugar

industry could not take a comprehensive view for its development and the administration of the British Merchant Capitalist, retained its forced commercial character leading to a dual structure of sugar production - capitalist and pre-capitalist. Moreover, the forces of trade and commerce could not make this industry more than a commercial enterprise - being a subject to the role of market forces. In course of time, sugar became one of the major items for mass consumption. But the commercial character of this industry being a subject of market forces made its production fluctuating in character. However, in free India some efforts were made to promote sugar industry as an integral part of industrial development in particular.

However, for all practical purposes, the advent of modern sugar processing industry by direct vacuum pan method in India may be said to have started with the adoption of a policy of discriminating protection by the Government of India in 1932. In the mid-twenties a number of sugar mills sprang in U.P. and Bihar. Their case against the Japanese sugar then commanding the Indian market was referred to the Tariff Board and the Sugar Industry Protection Act was passed by the Indian Legislature in 1932, foundation being thus laid for what proved to be a dynamic enterprise of gigantic dimension with profound economic value.

Sugar industry in India is said to be 'the child of protection.' This is for the obvious reason that before

1932, when it was granted protection, the position of this industry was not satisfactory. Industry developed rapidly from 1932 onwards when protection was granted under the Indian Sugar Industry (Protection) Act, 1932. The number of sugar factories which were 32 during 1931-32 season, rose to 136 during 1935-36 and the production of sugar rose to 1.6 lakh tonnes to 9.47 lakh tonnes during that period. Subsequently there was practically no development in the sugar industry and second phase of development took place under the different Five Year Plan periods, after the Industries (Development and Regulations) Act, 1951, came to force in May 1951. Under this Act, it became incumbent on each entrepreneur to take a licence from the Government of India both for establishment of new sugar factories and expansion of the daily cane crushing capacity of the existing sugar factories.

Since the inception of planning in India in 1951, there has been a gradual extension in the area of intervention in the industry coupled with kaleidoscopic change in Government policies towards the industry. The Government has been prompted to bring the industry under effective control on account of the fact that its product is an essential item of mass consumption. In addition, the price of the item is highly sensitive to the conditions of demand and supply which themselves are subject to seasonal fluctuations. Although, there has been an overall increasing trend in sugar production in the country but like other agro-based

industries, this industry has been subject to wide and sometimes violent fluctuations. One of the main reason is that the raw material of this industry, i.e. sugarcane comes from agriculture and in India due to various reasons, agriculture is most instable. Sometimes it suffers from drought and sometimes from floods and heavy rains. Other factor, that is, Government policies, which plays sensitive role for the sugar industry. Almost all the sections of the industry, i.e. purchase of raw material, production of sugar, release of finished product and price, comes under the effective control of the Government.

PROBLEMS

Government sugar policies are a tangle of contradictions in our country. Like other farm intervention policies, sugar policies have squandered farmers as well as industry. The Government intervention in this sector has been prevailing both in the demand and supply side. The central government fixes the support price of sugarcane every year. The state government usually refix this support price by making further enhancement on the plea of providing remunerative price of sugarcane growers. The sugar mills are forced to purchase sugarcane on this price. Because of this high price of sugarcane fixed by the Government, provides comparative advantage to farmers in sugarcane cultivation. As a result, the production of sugarcane has increased enormously by acerage shift. On the other hand, government imposes

restrictions on demand side, i.e. mills by way of licensing controls of new mills, crushing capacity expansion, technology use and imposing levy on the sugar produced.

The combined impact of supply and demand, interventions result into more losses than gains and plunge the industry into crisis. On account of state policies the farmers were bound to burn sugarcane in their fields since last few years. Crores of rupees remained unpaid to the farmers. In recent past India produced about 220 million tonnes of sugarcane, while country had crushing capacity of 110 million tonnes of sugarcane. About 26.4 million tonnes of sugarcane was used as seed and chewing etc. 83.6 million tonnes of sugarcane was used in making khandsari and gur which produced 5.02 million tonnes of sugar (6 per cent recovery in terms of sugar). For each 100 tonnes of sugarcane used for khandsari/gur, country suffers a loss of 3.5 tonnes of sugar. This 3.5 tonnes of sugar per 100 tonnes of sugarcane is actually burnt along with bagasses to convert sugarcane into sugar or for other purposes.

So the crisis in the sugar industry prevails mainly because of government interventions in the form of poor post harvest processing technology, poor sugar policy, much government intervention and over political interference, etc. All this is more true in the case of Uttar Pradesh, where the state accounts 54 per cent of area of the total area under sugarcane in the country and 47 per cent of total sugarcane

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production of the country. Although, we are producing such a handsome percentage of sugarcane in the state of Uttar Pradesh, even then the share of sugar production is very low. Maximum wastage of the raw material is accounting by this state.

OBJECTIVES

In recent years serious imbalances have crept into the production and consumption of sugar in the country, distorting the sugar economy. Demand of sugar is increasing at a higher rate than its production. Government sugar policy is not so encouraging for the sugar mills, to fill the gap between production and consumption. On the other hand, Government imposes restrictions on mills by way of licensing controls on new mills, crushing capacity expansion, technology use and imposing levy on the sugar produced. In this situation sugar policy needs a new positive approach, to bring sugar industry out of crisis. Besides this, the study also provide an insight into the historical development of the sugar industry and its present position in the country. It would be useful while formulating new sugar policy for the upliftment and further development of the sugar industry. The major objectives of the study are as follows :

1. To document and analyse the development of the sugar industry;
2. To examine the price and production pattern of sugar in India and U.P.;

3. To examine and analyse Government sugar policy for the sugar mills and khandsari units;
4. To analyse the impact of technology restrictions;
5. To analyse the potential of the sugar industry; and,
6. To suggest policy measures to make sugar industry viable and sugarcane cultivation sustainable.

METHODOLOGY

The present study intends to examine the issues framed in the objectives, in the context of sugar manufacturing sector. For the purpose of the study two sugar mills, Dhampur Sugar Mill (Private Sector) and Chandpur Sugar Mill (Government owned) of district Bijnor, Uttar Pradesh, have been consulted. This study is carried out on the basis of secondary information mainly. In addition, discussions were held, with managing authorities of the both mills, members of the cane cooperative society and officials of the cane commissioner's office, Lucknow. The data available on the sugar industry from published sources have also been utilized.

CHAPTER II

SUGAR INDUSTRY : PAST AND PRESENT

Sugar Industry is one of the major industries in India. It has long history. Although, modern sugar factories started in the first decade of 19th century, with one factory each being set up in Uttar Pradesh and Bihar but when one goes carefully through the history of sugar manufacturing then it is evident that India is the original home of the sugarcane as well as sugar manufacturing. The modern mill industry had a striking growth as a result of the imposition of protective import duties from 1932. Before this Protection Act, there were only 32 factories in the country and after imposition of the Act, within a period of five years the number of factories increased to 137 and production went up seven times to nearly one million tonnes pushing India to the top among the sugar producing countries.¹ It was producing about 6.7 per cent of the total world output but has been now surpassed in annual production only by countries like USA, Cuba and Brazil. So first of all it is important to know about the history of the sugar industry and its present position in the country.

HISTORICAL BACKGROUND:

Sugar has been known to India for about 2000 years and there is ample evidence to show that India is the original

home of sugarcane as also of sugar manufacture. Sugar has been mentioned in the epics as one of the five 'Amritas' i.e., celestial sweets. Nothing tastes so sweet as sugar. Even the English word sugar is derived from the Sanskrit word Sarkara. The word shakkar was in vogue in Prakrit literature for sugar. Therefore, it is not surprising that almost similar name Sharkara is found in many different languages of the world, with varying in pronunciation. It has been mentioned as 'Sehakar' in Persian, 'Sukkar' in Arabic, 'Suicar' in Assyrian, 'Saccharum' in Latin, 'Azucar' in Spanish and Portuguese, 'Zuhero' in Italian, 'Sucre' in French, 'Zucker' in German and so on. The word 'Chini' has also an interesting story behind it. It is said that the Chinese king sent some Chinese to the king of Patliputra for getting them trained in the art of sugar manufacture. When these Chinese completed their training and were produced before the king during their Fare-well ceremony, the king had name 'Sharkara' also as 'Chini' as a mark of friendship between India and China.²

Mention about sugarcane is found in the Artharva Veda in 5000 B.C. There is perhaps no earlier description of sugarcae than this in the hoary history of the world. About 800 B.C. sugarcane was perhaps taken eastward, i.e., China, where it found suitable soil for development. Reference of sugar are found long ago in the institutes of Manu and the treatises of Charka and Susruta dealing with medicine. It mention in the records of Megasthenese and in Arthashastra of

Chanakya is also traced back to the period 321-296 B.C. Alexander the Great, and his soldiers were the first foreigners (Europeans) to find sugarcane in India when they came over to this country in 327 B.C. The art of making sugar was discovered in India. The cane was cut into pieces and crushed by a heavy weight and juice thus obtained was boiled and stirred until solids formed. These solids being of uneven shapes and size were called Sarkara, the Sanskrit term for gravel. The large solid were called Khand from which the world candy has descended. The Chinese Emperor, Tsai-Hang set a mission to Bihar in about 600 A.D. to ascertain and study the art of sugar manufacture. From India the knowledge of sugar making went over to Persia. It would thus be seen that India has been the original home of suarcane as also of sugar manufacture.³

A close study of the literature of the Mohammedan period reveals that first class white sugar was produced from 'Gur' throughout Northern India specially in Burdwan and Murshidabad divisions in Bengal upto Gorakhpur in Oudh before the advent of the British.⁴ In the past, India enjoyed monopoly in the world from the point of view of both sugar production and sugar supply. Indian sugar used to pass through the famous caravan routes of Khaiber and Bolan passes. Sugar from India used to be shipped to Genoa, Veniece and many other countries. But the first jolt came in 1453, when the Turks captured constantinople and demand heaby tributes on sugar passing through the city. This trade had

to face a second jolt with naval blockade of the British which caused hindrance to France in getting sugar from India. Napoleon had taken initiative in sugar production in the France, consequently France succeeded in the production of sugar out of sugar beet. This was followed by bounties which subsidised sugar export trade from almost all the west European countries. This gave a serious blow to the Indian sugar trade. The sugar industry of India, which had bad times in the Nineties of the last century. One of the remarkable features of the foreign trade during the decade 1890-1900 was the enormous rise in sugar imports, from the countries like Java and Mauritius.

Historically it is said that the modern process of sugar manufacture was introduced in the west as early as in 1853, but the same process came to India as late as in about 1903 when the first sugar factory with vacuum pan process and modern milling method was commissioned in Saran at Marhowrah in Bihar in 1904. It is said that less than three hundred years ago, the mass of the people scarcely tasted sugar. Sugar was the rarest of luxuries and was even esteemed as a medicine. But Gangetic India had long known the sugarcane and the art of boiling sugar from it. Evidently the Chinese acquired the knowledge about it from India in the first half of the seventh century. It was the Arabs who finally brought the practical art of cultivation of sugarcane to the knowledge of western Europe. It was the great age of discovery by the Portuguese and Spaniards which carried the

cultivation of sugarcane around the world. Sugarcane was planted in Madeixa in 1420. It was carried into Santo Domingo in 1494. Early in the sixteenth century it spread to the West Indies and to the other parts of South America. In the year 1700 only ten thousand tonnes of sugarcane came to Great Britain.⁵

It is evidently true that from India cane sugar (sucrose), which is universally used as an essential consumption item, spread to other countries. From India, the growing of sugarcane and its use in the making of sugar spread to China, Ceylon, Java and Persia in the sixth century and to Spain in the eighth century. In the course of their conquests from the seventh to the ninth centuries, the Arabians introduced the growing of sugarcane and the manufacture of sugar into Cyprus, Egypt, North Africa, Spain and Sicily. The cultivation of sugarcane was promoted in all the tropical colonies of the European Nations after the discovery of America. It spread to Cuba in 1511, Mexico in 1522, Portorico in 1523, Jamaica in 1527 and Peru and Brazil at about the same time. In 1731, the Jesuits introduced the cultivation of sugarcane into Louisiana which later on became the principal North American producer of raw sugar.⁶

Ib-in-Batuta during his travel in India in 13th century has greatly admired sugarcane grown in India in his 'Safarnamah'. There is a specific reference to the Paunda Cane of the Malabar coast therein. There is a good

discription of the method of sugarcane cultivation and making of all forms of sugar and distillation of spirits from it in the 'Ain-i-Akbari'.⁷ Munshi Sabhan Rai of Patiala (1695) had given interesting description of sugarcane in his 'Khulastu-in-Tawarikh'. Sher Ali Afsos (1804) mentions in his 'Araish-i-Mahfil', the classification of the sugarcane of India, during the 17th century was broadly accepted. Thus it admits of no doubt that India is the original home of the sugarcane and sugar, in view of the aforementioned facts of historical records.

SUGAR INDUSTRY DURING COLONIAL PERIOD

Minden Wilson observed the historical development of modern sugar in India and about several indigo concerns in Bihar, as he visited the state in the year 1887, when he had back to Calcutta, he wrote 'Reminiscence of Bihar in 1887, and it published in the year 1908. This study amply demonstrated, the development of modern sugar mills in India and several indigo concerns in Bihar. In fact, the history of sugar in the remote past is romantically intermingled with the history of indigo and saltpetre.⁸

In 1877, a very black cloud hug over the indigo industry. Towards the end of the 19th century indigo cultivation began to decline due to cheap synthetic indigo entering into world market. The introduction of aniline dyes and consequent fall in the price of indigo as explained by

Lieutenant Governor of Bengal, Ashby Eden. According to him factories grew indigo side by side with sugarcane but valuable 'seeth' (refuse) a very useful manure was neglected. There are evidence in the documents of 1793 and thereafter to show that almost all the indigo factories in Tirhut were spoken of as being sugar and salt patre as well as indigo 'manufactories'. The cause of the abandonment of sugar industry after 1849-50 was the high prices of indigo and the dye. Similarly before sugar was started in 1845, price of indigo were at a very low ebb.

In 1791, the massacre of almost all the white population in black rebellion in Hayati and San Domingo made the largest producers and exporters disappeared, consequently the price of sugar rose high. The East India Company took advantage of this price rise in exporting sugar from India to England not as manufacturers but merely as merchants. In the same year 1791, the Company exported four parcels from Bengal to serve as loaf sugar for tea. The sugar was sold at Rs.88-6-0 to Rs.156-6-0 per cent. The economic policy adopted by the British Empire began to give impetus to the sugar industry in India. There were two groups of producers. They were the West Indian merchants and planters and the East India Company. The former were more influential because of the fact that the duties favouring the West Indian producers had been in force for many years. In 1821, the duty was modified and in 1836, East and West Indian sugar entered England and equal terms for trading. The equalisation of duties led to

sizeable increase in investment in sugar industry in India. Naturally, the West Indians and Mauritian planters were greatly attracted to India. Consequently by 1846, the export of sugar from India to Britain rose to 60,000 tonnes. Factories were started at Motihari, Azizpur, Barachakia, Gorakhpur and Rosa in the West Indian plain with an aim to produce sugar directly from sugarcane. Bunkut was turned into a sugar factory in 1904-05 with the latest and the best machinery. Kachunia also was for some time used as a sugar factory.⁹

India used to export large quantities of sugar, primarily unrefined upto the middle of the nineteenth century. Till 1863-64 the exports from India exceeded the imports. The position was, however, quite reverse from the year. The first onslaught on the sugar industry of India was made by Mauritius and later from the bounty-fed beet sugar of Europe. The import of sugar from Java captured the Indian market. In this way the hard competition from foreign countries made the situation of sugar industry in India quite hopeless. From 1884-85, the imports of sugar began to increase rapidly.

The fruitful efforts had been made by most of the sugar exporting countries in the world and render help for the high variety of sugarcane. The Government succour for the better methods of sugar production, either by beet or by sugarcane. The Java Government was forcing to the sugarcane growers that they should make concentrated blocks, some time by compulsion

and some time by inducement from the Government side. By doing this, Government wanted that the Central Sugar Factories should be erected economically viable.¹⁰ With the advent of the East India Company, the Indian sugar industry received a setback and European planters in the West-Indies developed sugar industry. There was, however, some temporary revival in 1836 when the rates of duty on West Indies sugar were raised. But because of the adoption of the principle of free trade by England in 1846, the Indian industry receded to the background.

It is worthy of mention that the increase in the quantity of sugar imported from foreign countries was obviously visible in spite of a heavy import duty levied by the Government. The range of import duty was from 50% to over 100% and as such the Government of India received a vast amount of money therefrom. In the year 1900-01, for example, the earning of Government of India from import duty on sugar was of the order of Rs.53 lakhs. Though, there have been extraordinary high expenditure and remarkably high revenue yield from sugar import for many years, the Government did not realise the full significance of the development of the sugar industry until after the World War in spite of its National importance from the view point of agriculture, rural and industrial economy.¹¹ Import of sugar figured prominently till it suffered a setback during the year of World War I, when on an average the annual imports were 5,31,713 tonnes as against the previous annual average of

7,23,915. The peak figure was reached in 1929-30 when the import reached the all high figure of 9,30,600 tonnes. The possibility of utilising the sugar resources of India was examined after the World War I without any fruitful result by the Government. In February 1919, W. Sayer was appointed by the Government of India to compile relevant data as regards the best method of exploiting the advantages this country possessed in respect of sugarcane. When the position of sugar industry was examined by Indian Sugar Committee (1920), there were 22 sugar factories in India working only with sugarcane. Of these, 10 were situated in North Bihar, 5 in United Provinces (U.P) and 3 in Madras. Of the 5 factories in U.P., 3 were located on the borders of Bihar in the District of Gorakhpur. The production from the 18 factories actually working during 1919-20 was only 23,100 tonnes of sugar and the production was approximately equal to the production of three average factories of Java.

India has been an exporter of sugar upto middle of the 19th century. But soon after it began to import refined sugar, mostly from the British colony of Mauritius. From 1890 imports of bounty-fed sugar from Austria and Germany began to increase.¹² This was bound to affect the import of sugar from Mauritius and manufacturer of sugar as well as cultivation of sugarcane of India. It was estimated that on account of dumping of cheap European sugar, cultivation of sugarcane in India had decreased by 13 per cent. The period also witnessed widespread closing down of sugar refineries.¹³

Complaints against the entry of European sugar into Indian market were made to the Government of India, not by the Indian manufacturers and cultivators of sugarcane but by the importers. Accordingly, in March 1899, a Bill to levy a countervailing duty on import of bounty-fed sugar was introduced to the legislative council. But the Government vehemently denied that intaking the decision, it was influenced by imperial considerations, such as, the protection of the interest, of the planters and manufacturers of Mauritius. The Bill was unanimously passed.¹⁴

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The imposition of the countervailing duty, however, did not produce the desired result. Imports of beet sugar continued to increase. In 1902, therefore, rates of countervailing duties were further legislation of the Government of India was to save the sugar industry of Mauritius and Java, rather than to protect the Indian sugar industry. The idea of protecting the latter was more incidental than intended. As a matter of fact, the largest quantity of sugar manufactured in India was unrefined, and this could not compete with the refined European sugar. Hence, there was no danger to India's sugar industry by the import of European sugar.¹⁵

As for the development of refined sugar industry in India was concerned, bounty-fed sugar from Europe was as much inimical to its growth as the sugar from Mauritius. Both of them played an equally important role in running Indian sugar

refineries. Prithwis Chandra Ray, an eminent economist of Bengal had observed in his pamphlet on the sugar industry that even before the entry of bounty-fed sugar, i.e., between 1883-90, in Bengal alone, 89 sugar factories had to be closed down as a result of competition with duty free sugar of Mauritius.

An other issue of importance relating to the tariff policy of the previous period was that of the "Imperial Preference."¹⁶ The first occasion to state India's stand on imperial preference arose in 1903, when Lord Curzon was the Viceroy. His Government was opposed to the idea of granting Imperial Preference to the British goods. India's export consisting mainly of important industrial raw materials were admitted in foreign countries either free of any duty or on payment of moderately uniform duties.

When the World War I broke out in 1914, India was in a fairly sound financial position. However, due to continuation of the war for a protected period, imposition of additional taxation became inevitable. In 1916, the 'list of exemption' was considerably reduced and the general import duty was raised from 5% to 7.5%. Increase in duty was chiefly on sugar which went upto 10%. The continuation of the war presented Indian manufacturers with an opportunity of a kind unknown before. On the one hand, there was a big demand for manufactured goods to meet the war requirement of the Government, and on the other, there was an unprecedented shrinkage of importes of manufactured goods from Europe,

providing automatic protection against foreign competition which normally could have been gained only through high tariffs. There was one significant gain which emerged from the war, for industrial development of the country. The changed outlook of industrial policy of the Government led to the appointment of the Industrial Commission in 1916, to examine and suggest the ways in which Government could give encouragement to industrial enterprises. Thus the World War I had set the stage for the evolution of the Indian Tariff Policy in proper perspective in the best interest of sugar industry too.

With the end of the war, the respite from foreign competition was over. This caused an immediate setback to the industrial development. The general import duty was raised from 11% to 15% in 1922, but the import duty on sugar was raised from 10% to 15% in 1921 and to 25% in 1922. The question of adopting a policy of protection was taken up by the Indian Legislature in February 1923 on a non-official resolution of Mr. Jamnadas Dwarkadas, a member of Fiscal Commission. The resolution was finally accepted by the Government of India under pressure from educated public opinion. The war period may be set to be the turning point in the history of the tariff policy of the country. Its combination came in the post war period.

The policy of discriminating protection was neither broad-based in scope nor was applied with sympathy. As a

result, protection was granted only to a few industries. But despite its limitations and defects, there is no denying the fact that the policy of discriminating protection, benefitted considerably the protected industries, amongst which the sugar industry has a significant position. The substantial increase has been registered by sugar industry under protection. In fact, beneficial result of protection was discernible in sugar industry even before the outbreak of the World War II. In the case of sugar, import was falling down, within three to four years, after the grant of protection.

The Indian Sugar Committee (1920) wanted the Government to set up a Sugar Board, a Sugar Research Institute and a Sugar School to train up sugar technologists. One of the recommendations was for fixing the scale of prices for sugarcane growers by the Government for the protection of the cane growers against exploitation by the Sugar factories. But the non-implimentation of the recommendation of the Indian Sugar Committee by the Government for many years naturally could not give any impetus to the development of sugar industry. The revenue duty on sugar went on increasing. In June 1925, the import duty on sugar on ad Valorem was converted into a specific one and the rate rose to Rs.4-8-0 per cent. This rate continued upto February 1930. These changes in policy of revenue duty brought about by the Government of India aimed at realising higher revenue without any guarantee on the part of the Government for the potection of suga industry in future.¹⁷

The vaccum-pan method in India may be said to have started with adoption of a policy of discriminating protection by the Government of India in 1932, but Statutory Control on sugar was first imposed in April, 1942, under the Sugar and Sugar Products Control Order, 1943. The Sugar Controller to the Government of India regulated production, distribution and prices of sugar. With effect from May 1, 1942, no sugar factory was permitted to effect sales of sugar to persons other than those authorised by the sugar controller. Allocations of monthly quota of sugar to be delivered by Uttar Pradesh and Bihar factories, to other states were made by the Sugar Controller.¹⁸ During the period 1942-43 till 1950-51 the Indian sugar industry had to pass through a difficult time for various reasons when the output fluctuated erratically between about 9 to 11 lakh tonnes mainly on account of the instability of sugarcane supplies caused by the Government's preference to food crops during the war years.

SUGAR INDUSTRY AFTER INDEPENDENCE:

Since independence, there has been an overall increasing trend in sugar production in India. The number of sugar factories increased from 20 in 1930-31 to 139 in 1949-50 and total sugar production from 1,20,000 tonnes to 9,95,000 tonnes during the same period. This phenomenal rise in both

the number of factories and the production of sugar led to almost self-sufficiency in India. The sugar industry received its due share of consideration in the Five Year Plans of the Government of India. A new era commenced for the industry in 1951, because of the fact that development of regulation of sugar industry came under the control of the Government of India for the first time in its annals. Under the Industries (Development and Regulation) Act of 1951, regulation of the sugar industry came under the control of the Central Government. In 1950-51, prior to the initiation of the First Five Year Plan, there were 139 sugar factories in India of which 3 were co-operative and 136 Joint Stock and other factories. Of the three co-operative sugar factories, one was in Maharashtra and two in Andhra Pradesh. The sub-tropical belt had 109 sugar factories accounting for 78 per cent of both the total number of factories and the overall sugar production capacity in the country. Under the Industries (Development and Regulation) Act of 1951, came to force in May 1951, all the 139 sugar factories were registered. Under this Act, it became incumbent on each entrepreneur to take a licence from the Government of India both for establishment of new sugar factories and expansion of the daily cane crushing capacity of the existing sugar factories.¹⁹

The number of sugar factories under co-operative sector was more than one-third of the total number of the sugar factories in the country in 1974-75. The most significant

development in the Indian Sugar Industry during the last 25 years was the emergence and rapid growth of the co-operative sector primarily due to the preferential treatment given to this sector by the Government in according licence and giving financial assistance. Of the 96 factories working under cooperative sector in India in 1974-75 more than one third were established in Maharashtra. The tropical belt has brought about outstanding major changes. Of all the states in the tropical region, Maharashtra alone comprises of more than 50 per cent of the total co-operative sugar factories. In 1974-75, the number of sugar factories in Maharashtra under co-operative sector was 42.²⁰

In the First Five Year Plan period the volume of sugar production was 18.92 lakh tonnes, resulting in an increase of 69.23 per cent over 11.18 lakh tonnes in 1950-51, on the eve of planning period. The role of industry in the Second Plan was also equally commendable. The Second Five Year Plan had boosted the sugar production to 30.28 lakh tonnes with 170.84 per cent increase over the production in 1950-51. With 35.37 lakh tonnes in the Third Five Year Plan, the percentage of increase in production was 215.92, this exceeding the target of 35 lakh tonnes fixed under the plan. In the Fourth Five Year Plan, sugar production had touched 39.48 lakh tonnes with 253.13 per cent increase over the production in 1950-51. With larger carry forward stock of about 22 lakh tonnes from the previous season, the total availability of sugar was

still higher at about 51 lakh tonnes in 1970-71. The sugar production improved to 38.7 lakh tonnes in 1972-73 and about 39.48 lakh tonnes in 1973-74 due to increase in sugarcane acreage and its production. The industry had achieved a sugar output 47.9 lakh tonnes in 1974-75 against 39.48 lakh tonnes achieved during the preceding season 1973-74. The sugar production during the season declined from 47.92 lakh tonnes in 1974-75 to 42.61 lakh tonnes due to severe drought conditions in Tamil Nadu as also due to decline in production in U.P. and Andhra Pradesh. With about 58.42 lakh tonnes of sugar during the Fifth Five Year Plan, the country had more than 422.5 per cent increase.²¹

Due to abundance of cane supply and its lower off-take by Gur and Khandsari producers, the sugar factories had to crush more cane during 1977-78 season utilising 37 per cent of the cane crop as against their normal in-take of about 30 per cent. The industry achieved a record sugar production of 64.72 lakh tonnes by continuing crushing during the hot summer months with an installed capacity of about 55 lakh tonnes. The Government of India had estimated the requirement of sugar at 76.40 lakh tonnes by the end of 6th Five Year Plan i.e., by the year 1984-85. For achievement of this goal, the targets of the installed capacity and licensed capacity had been put at 80.4 and 96.2 lakh tonnes, respectively. India had the unique distinction of being the world's largest producer of sugar in 1981-82 with 8.4 million

tonnes exceeding the production of Cuba and Brazil. A notable feature of the season 1981-82 was the achievement of an all time record sugar output which was initially visualised at 75 lakh tonnes actually turned out to be much higher at 82.3 lakh tonnes. In this way India maintained its class in the top ladder of the world sugar producers although it relegated to the second position next to Brazil in the season 1982-83.²² The Sixth Five Year Plan had increased sugar production with 449.55 per cent increase over the production in 1950-51.²³

However, the sugar output had declined to only 59.17 lakh tonnes from 82.30 lakh tonnes in the previous season with the decrease of 28 per cent. While the overall sugarcane production had declined by 6.6 per cent, the sugar output declined by as much as 28.1 per cent. The sugar year 1982-83 commenced with a carry forward stocks of 32.7 lakh tonnes. With the production of 82.30 lakh tonnes and the off-take both for internal market and export was also higher at 64.88 and 4.25 lakh tonnes respectively.²⁴ During the 1983-84 season, sugar production declined to 59.16 lakh tonnes. In 1984-85, the position of sugar production was 61.44 lakh tonnes, which was slightly higher than the previous season's production.²⁵

The pragmatic sugar policy followed by the Government in the first 3 years of the 7th Five Year Plan has helped increasing sugar production substantially through better

availability of cane to sugar mills and higher productivity. Among other measures, the liberation of levy free ratio from 65:35 to 50:50 has been main contributory factor for maximisation of sugar output. The sugar production increased by 14.2 per cent in 1985-86, 38.4 per cent in 1986-87 and 48.3 per cent in 1987-88 over the production in the base year 1984-85.²⁶ This was possible through higher drawals of sugarcane and improvement in productivity.

The gradual liberalisation of levy free ratio from 55:45 in 1985-86 to 50:50 in 1986-87 and 1987-88 and 45:55 in 1988-89, 1989-90, 1990-91 and 1991-92 and 40:60 in 1992-93 had helped the sugar industry in maximising the sugar output in the following years. From about 85 lakh tonnes of sugar in 1986-87, the production increased to 134 lakh tonnes in 1991-92, a record increase in production. With a record production of 134 lakh tonnes of sugar achieved during the season, the total availability increased to 167.34 lakh tonnes and the carry forward stock at the end of the season was a record highest 49 lakh tonnes. The production declined to 106 lakh tonnes in 1992-93 season because of highly uneconomic working of the industry, high cost of production resulting in the accumulation of arrears on the industry. For the season 1993-94, the Government and the industry initially estimated the sugar production at 106 lakh tonnes achieved during the previous season, but the production declined to 98 lakh tonnes and the Government decided in March, 1994, to

allow import of sugar. About 15 lakh tonnes of sugar was reported to have been imported making a total availability of 145 lakh tonnes of sugar. Sugar production rose in 1994-95, pre-dominantly in Maharashtra, Uttar Pradesh, Tamil Nadu and Karnataka. In this season an all time record output of 146 lakh tonnes, which was a substantial increase of 50 per cent over last season's output of 98 lakh tonnes. The record production after meeting internal demand of about 121 lakh tonnes left a huge surplus of 25 lakh tonnes. Keeping this in view, Government suspended import and permitted export.²⁷

Table 2.1 reveals the various aspects of sugar industry since 1950-51 to 1995-96, such as the number of sugar factories in operation, total cane crushed by them, total sugar production and sugar recovery percentage, both for Uttar Pradesh and India as a whole. The sugar units of the country and U.P. state have grown gradually over the years. There were 138 units in India and 68 units in U.P., in 1950-51, 253 units in the country and 74 units in U.P. state in 1975-76 and 416 units in country and 116 units in our state in 1995-96, worked during these years. The production of sugar also rose in India from 11.18 lakh tonnes in 1950-51 to 164.51 lakh tonnes in 1995-96. The share of Uttar Pradesh also rose 9.98 lakh tonnes in 1950-51 to 43.79 lakh tonnes in 1995-96. Table 2.1 also shows the fluctuating trend of sugar production.

TABLE 2.1: NUMBER OF FACTORIES IN OPERATION, TOTAL CANE CRUSHED, SUGAR RECOVERY AND SUGAR PRODUCTION FROM 1950-51 TO 1995-96 IN INDIA AND UTTAR PRADESH

Sl. No.	Year	INDIA				UTTAR PRADESH			
		No. of factories in operation	Total Cane Crushed (000 tonnes)	Sugar Recovery (%)	Total Sugar Produced (000 tonnes)	No. of factories in operation	Total Cane Crushed (000 tonnes)	Sugar Recovery (%)	Total Sugar Produced (000 tonnes)
1.	1950-51	138	11147	10.03	1118	66	10205*	9.97*	998*
2.	1955-56	143	19141	9.83	1829	68	10921*	9.46*	1071*
3.	1960-61	174	31109	9.74	3028	71	12195*	9.50*	1130*
4.	1965-66	200	36404	9.68	3532	71	12205*	9.77*	1178*
5.	1971-72	221	30997	10.03	3108	72	13908	9.39	1201
6.	1972-73	229	40407	9.57	3873	72	15705	9.51	1371
7.	1973-74	229	42278	9.34	3948	73	15720	9.49	1401
8.	1974-75	247	48435	9.90	4794	73	15170	9.43	1431
9.	1975-76	253	41849	10.19	4262	74	12196	9.55	1161
10.	1976-77	271	48819	9.92	4840	79	15006	9.71	1471
11.	1977-78	286	67329	9.66	6457	85	20546	9.07	1862
12.	1978-79	299	59717	9.78	5842	88	15767	9.28	1463
13.	1979-80	299	39050	9.88	3858	89	10205	9.77	997
14.	1980-81	314	51584	9.98	5147	90	19921	9.46	1225
15.	1981-82	319	87342	9.66	8436	91	22790	9.13	2080
16.	1982-83	320	82695	9.95	8232	92	21041	9.67	2035
17.	1983-84	325	59022	10.03	5916	94	18514	9.33	1727
18.	1984-85	339	60092	10.24	6144	99	15448	9.58	1478
19.	1985-86	341	68576	10.23	7016	101	17211	9.59	1650
20.	1986-87	353	85224	9.98	8501	102	27110	9.43	2557
21.	1987-88	356	93943	9.70	9110	104	29975	8.90	2665
22.	1988-89	366	85693	10.21	8752	104	24289	9.49	2302
23.	1989-90	377	111149	9.89	10988	104	33298	9.07	3008
24.	1990-91	385	122319	9.85	12047	105	32756	9.08	2975
25.	1991-92	392	133987	10.02	13404	105	39756	9.16	3654
26.	1992-93	393	103002	10.31	10609	107	29578	9.66	2857
27.	1993-94	394	98348	10.00	9833	109	28988	9.37	2715
28.	1994-95	408	147643	9.92	14643	109	38311	9.41	3609
29.	1995-96	416	174761	9.42	16451	116	40250	8.70	4379

* Provisional.

Source: Sugar Year Book (1995-96-97), Vol.I, ISMA, New Delhi.

PRESENT POSITION OF SUGAR INDUSTRY:

At present there are 617 licensed sugar factories in the country, consisting of 225 in private sector, 70 in public sector and 322 in the co-operative sector. The total number of installed sugar factories in the country are 447, out of which 133 in the private sector, 67 are in the public sector and 247 are in the cooperative sector (As on 30.9.1996). All these three sectors are also prevailing in Uttar Pradesh. There are 159 licensed sugar factories out of which 117 are installed factories in the state, consisting of 90 private licensed factories out of which 51 are installed, 35 are in public sector, all these are installed and 34 are in co-operative sector, out of which 31 are installed sugar factories. (Table 2.2).

In India, most of the existing plants and machineries are fairly old and required rehabilitation of these plants. This is specially, in the case in Northern India. All these plants need immediate modernisation and revitalisation. Because of old machinery the factories have often to be closed for mechanical break-downs etc. Bhargava Commission in 1974 concluded: In 1973 performance of 40 per cent or 78 out of 197 factories that he studies was below normal, mainly because of mechanical break-down. The net result of these factors is that the recovery of sugar is only 10 per cent from sugar content or 12 per cent. Sickness in sugar industry is primarily related to old units those are

TABLE 2.2 : STATE-WISE, SECTOR-WISE NUMBER OF LICENSED & INSTALLED SUGAR FACTORIES

(AS ON 30-09-1996)

Sl. No.	State	Total Number of existing Licensed Sugar Factories				Total Number of Installed Sugar Factories			
		Pub-lic	Pvt.	Co-op.	Total	Pub-lic	Pvt.	Co-op.	Total
1.	Uttar Pradesh	35	90	34	159	35	51	31	117
2.	Punjab	1	6	17	24	-	6	16	22
3.	Haryana	-	5	11	16	-	2	12	14
4.	Rajasthan	1	1	1	3	1	1	1	3
5.	Madhya Pradesh	2	9	3	14	1	5	3	9
6.	Gujarat	-	-	28	28	-	-	10	10
7.	Maharashtra	-	6	155	161	-	6	106	112
8.	Bihar	14	17	-	31	14	16	-	30
9.	Assam	1	-	2	3	1	-	2	3
10.	Orissa	1	8	4	13	-	4	4	8
11.	West Bengal	1	1	-	2	1	1	-	2
12.	Nagaland	1	-	-	1	1	-	-	1
13.	Andhra Pradesh	5	30	18	53	7	12	18	37
14.	Karnataka	4	29	27	60	3	10	18	31
15.	Tamil Nadu	3	21	17	41	3	17	15	35
16.	Pondcherry	-	1	1	2	-	1	1	2
17.	Kerala	-	1	2	3	-	1	2	3
18.	Goa	-	-	1	1	-	-	1	1
19.	Dadra Nagar & Haveli	-	-	1	1	-	-	-	-
20.	Manipur	1	-	-	1	-	-	-	-
All India Total		70	225	322	617	67	133	240	440

Source: Sugar Year Book (1995-96-97), Vol.1, ISMA, New Delhi, p.61.

technically inefficient due to either obsolescence of plants and equipments'. The other important factor which leads the industry into the crisis, is the Government policies and its interventions towards the sugar industry. It is evident from the historical background of the sugar industry, that since 1932, when this industry came under the control of Government by a policy to protect industry from the discrimination and again in April, 1942, Statutory Control was first imposed on it, the number of sugar factories and the production increased fairly, led country towards almost self-sufficiency.

The sugar industry was granted protection till 1950. Since then, Government gradually started interfering in all the departments of the sugar industry, from its raw material (sugarcane) to its finished goods (sugar). The Central Government fixes the support price of sugarcane every year. The state Governments usually re-fix this support price by making further enhancement on the plea of providing remunerative price of sugarcane growers. Political interference also rose in this industry, because the product of this industry now became the item of mass consumption and raw material (Sugarcane) comes from the rural area. The combined impact of these interventions results into more losses than gain at National level and plunges the industry into a crisis.

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CHAPTER III

PRODUCTION AND PRICE POLICY OF SUGARCANE

Sugarcane is the main raw material of sugar industry. The cost of sugarcane accounts for about 70 per cent of the cost of sugar production. It is, therefore, necessary that adequate quantity and good quality of sugarcane is supplied to the mills on a regular basis. The production of sugarcane like other agricultural commodities is subjected to the vagaries of nature and that extent working of sugar mills.

The sugarcane is a juicy plant. When exposed to sun after its cutting, its juice dries up and its recovery falls down. Not only that, even when the sugar plants remain standing in the field for a long time during summer season, the recovery is effected. In the years of surplus supply, the position of sugar factory becomes a bit odd, because they are compelled both by the Government and farmers to prolong their crushing season, often during the summer heat. With the result that the recovery falls down to the minimum, putting the industry to a loss.

The problem of sugar factories is aggravated more during the season of short cane supply. The Gur and Khandsari, being free from control, become the harder contestants for the cane supply. In such seasons, the producers of Gur and

Khandsari usually pay higher prices to sugarcane growers and thus sugarcane is diverted to gur and khandsari units from sugar mills. On the other hand, the rise in production of sugarcane does not ensure the rise in supply of sugarcane to sugar mills. Sugar mills have to work under certain constraints, such as the minimum statutory prices of sugarcane and the prices fixed by the state government, control on sugar production, sale and prices by the Government. But these constraints are either minimum in the case of Gur and Khandsari or not at all. It facilitates added advantages to Gur and Khandsari units in the field of consumption for sugar-cane. It is natural that overall output of the sugarcane has an important impact on the utilisation of sugarcane for sugar manufacture, but it is a demand of sugarcane for Gur and Khandsari that influences considerably the availability of sugarcane to vacuum pan factories. The Gur and Khandsari units have generally freedom to manoeuvre whenever the price of Gur and Khandsari is high.

TRENDS IN SUGARCANE PRODUCTION AND YIELD

The area under sugarcane its production and yield per hectare had shown an upward trend during the period 1950-51 to 1996-97 in the country. However, there had been variations in both area under cane and production from year to year. For example while the yield per hectare during three years period from 1975-76 to 1977-78 increased about

5.5 tonnes, the yield per hectare declined to 49.1 tonnes in 1978-79 and 49.2 tonnes in 1979-80 due to unfavourable weather conditions. The yeild per hectare in 1980-81 again increased to 57.8 tonnes and to 58.4 tonnes during 1981-82. The yield per hectare was 59.9 htonnes in 1985-86, 65.6 tonnes in 1989-90 and 71.1 tonnes in 1994-95 the highest ever achieved so far due to favourable weather conditions at the time of sowing and also during the growth period, like the years 1981-82 and 1987-88, 58.4 tonnes and 60.0 tonnes respectively (Table 3.1).

In Uttar Pradesh too, the area, production and yield showed an upward trend since 1950-51. During 1975-76 to 1977-78, the area of sugarcane increased from 1441 thousand hectare to 1637 thousand hectare and production rose 58359 thousand tonnes to 76819 thousand tonnes respectively. The highest even achieved since 1950-51 upto 1996-97 in the sugarcane area and in sugarcane productin, was the year 1995-96. In this year the area under sugarcane crop was 1974 thousand hectare and th sugarcane production was 119830 thousand tonnes. The yield was also highest even 60.70 tonnes since 1950-51 to 1996-97. This was because of favourable weather condition in U.P. The sugarcane cultivation in state seen in terms of total area under sugarcane shows a fluctuating trend. In the year 1977-78 the total area under sugarcane was 1637 thousand hectares which worked out to be 8.97 per cent of the net area sown in the State. The year 1980-81 witnessed the least area under

sugarcane cultivation 1363 thousand hectares and was only 7.91 per cent of the net area sown. The figure of 1807 thousand hectares was achieved during the year 1987-88 and this was 10.50 per cent of the net area sown. While the figures of the area show, fluctuations over the years the figures relating to average yield by and large show an increasing trend except for a couple of years in between. Thus the yield in tonnes per hectare went up considerably from 40.49 in 1975-76 to 55.79 by the year 1990-91 and finally the yield was 60.70 tonnes per hectare in the year 1995-96, highest ever achieved since 1950-51 (Table 3.1).

The sugarcane acreage which was 1707 thousand hectares in 1950-51 in the contrary, the base year of the First Five Year Plan has increased to 3844 thousand hectares in 1991-92, which declined to 3572 in 1992-93 and 3422 in 1993-94. However, the year 1994-95 saw a dramatic increase to 3815 thousand hectares. On the whole annual growth rate of sugarcane acreage has been around 5 per cent. Sugar cane production which was 69920 thousand tonnes in 1950-51 has grown four-fold to 2712 lakh tonnes in 1994-95. Yield per hectare has also increased from 67.1 tonnes per hectare in 1993-94 to 68.2 tonnes per hectare in 1996-97. This table shows that the cane production and cane acreage fluctuated widely reflecting distinct cyclic trends. The cyclic fluctuation directly reflects upon the sugar cane and sugar policy adopted by the Central Government.

Table 3.1 : Average Production and Yield per Hectare of Sugar Cane (All India and U.P.)

Year/ Season	ALL INDIA			UTTAR PRADESH		
	Area (000 ha.)	Produ- ction (000 tonnes)	Yield per ha. (in tonnes)	Area (000 ha.)	Produ- ction (000 tonnes)	Yield per ha. (in tonnes)
1950-51	1707	69920	41.0	1014	40030	39.47
1955-56	1846	72692	39.4	1101	40537	36.81
1960-61	2514	110544	45.8	1329	54516	41.02
1965-66	2836	123990	43.7	1490	56650	38.02
1970-71	2617	126368	48.3	1345	54672	40.64
1975-76	2772	140604	50.9	1441	58359	40.49
1976-77	2866	153007	53.4	1456	65215	44.79
1977-78	3151	176966	56.2	1637	76819	46.93
1978-79	3088	151656	49.1	1634	62324	38.14
1979-80	2618	128833	49.2	1373	51228	37.31
1980-81	2667	154247	57.8	1363	64205	47.10
1981-82	3193	186350	58.4	1660	76440	46.05
1982-83	3357	189505	56.4	1783	81387	45.65
1983-84	3110	174076	56.0	1688	78323	46.40
1984-85	2953	170319	57.0	1536	70638	45.99
1985-86	2859	170648	59.9	1490	73058	49.03
1986-87	3079	186090	60.4	1678	84736	50.49
1987-88	3279	196737	60.0	1807	93350	51.66
1988-89	3329	203037	61.0	1779	89371	50.23
1989-90	3438	225569	65.6	1761	97422	55.32
1990-91	3686	241045	65.4	1856	103562	55.79
1991-92	3844	253995	66.1	1933	111098	57.47
1992-93	3572	228033	63.8	1858	102929	55.39
1993-94	3422	229659	67.1	1761	104082	59.10
1994-95	3815	271229	71.1	1832	109908	60.00
1995-96	4139	282945	68.4	1974	119830	60.70
1996-97	4011	273579	68.2	1970	118540	60.18

Source : Indian Sugar Year Book (1995-96-97), ISMA, New Delhi.

UTILIZATION OF SUGARCANE

The utilization of sugarcane for the manufacturing of white sugar is increasing with the increasing demand of white sugar in the country. During the years 1976-77 to 1978-79 the utilization of sugarcane for production of white sugar increased from 32 per cent to 39.4 per cent but it decreased to 30.3 per cent in the year 1979-80 because of fall in sugarcane production. It is interesting to note that whenever the percentage use of sugarcane increased in sugar mills for the production of white sugar the percentage of sugarcane use in production of Gur and Khandsari decreases and during the year when sugarcane crop was poor and lesser supply to sugar mills the percentage use of sugarcane increased in the manufacturing of Gur and Khandsari. Such as percentage use of sugarcane in Gur and Khandsari units was 48.8 per cent in the year of normal crop season 1978-79 and 39.4 per cent was in sugar mills but it was as high as 58.0 per cent utilisation of sugarcane in Gur and Khandsari units and decreases use of sugarcane in mills to 30.3 per cent in the low crop season 1979-80. This is because of Government policy which have a complete control on sugar mills and very minimum in case of Gur and Khandsari.

Bureau of Industrial Costs and Prices, 1983, says, when the cane crop is short, the producers of Gur and Khandsari pay unduly high cane prices to divert it from sugar factory

Table 3.2 : Utilisation of Sugarcane for Different Purposes

Years/ Season	Production of Sugar- cane (000 tons)	Cane Used for (000 Tonnes)			Percentage of Sugarcane Production		
		Production of White Sugar	Seed, Feed Chewing etc.	Gur and Khandsari	Production of White Sugar	Seed, Feed Chewing etc.	Gur and Khandsari
1976-77	153007	48967	18317	85723	32.0	12.0	56.0
1977-78	176965	67288	21029	88648	38.0	11.9	50.1
1978-79	151655	59715	17957	73983	39.4	11.8	48.8
1979-80	128833	39048	15104	74681	30.3	11.7	58.0
1980-81	154248	51598	18201	84449	33.4	11.8	41.3
1981-82	186358	87356	19278	79724	46.9	11.8	54.8
1982-83	189506	82694	22371	84441	43.6	11.8	44.6
1983-84	170476	59022	21136	93918	33.9	12.1	54.0
1984-85	170319	60092	21000	89227	35.3	12.3	52.4
1985-86	171681	68576	20326	82779	40.0	11.8	48.2
1986-87	186090	85184	22242	78664	45.8	12.0	42.3
1987-88	196737	93943	23608	79186	47.8	12.0	40.2
1988-89	203037	85693	24161	93183	42.2	11.9	45.9
1989-90	225569	111149	26843	87577	49.3	11.9	38.8
1990-91	241046	122287	28552	90207	50.7	11.9	37.4
1991-92	253995	133987	26669	93339	52.8	10.5	36.7
1992-93	228033	103002	27136	97895	45.2	11.9	42.9
1993-94	229659	98348	87559	103752	42.8	12.0	45.2
1994-95	275540	147598	32706	95236	53.6	11.9	34.5
1995-96(P)	282945	174357	33586	75002	61.6	11.9	26.5

P = Provisional

Source : Indian Sugar Year Book (1995-96-97), p.13, ISMA, New Delhi.

areas. This induces the cane growers to expand their cane acreage and consequently, sugarcane production. But when the production of sugarcane goes up, the Khandsari and commercial Gur producers reduce their prices to highly uneconomic levels. In cane glut years wide disparity invariably exists between the prices which the sugar factories pay and the prices which khandsari and Gur producers offer. This not only results in diversion of cane in reverse direction but also leads to shrinkage in cane acreage and consequently, lower cane production.¹ The utilisation of sugar cane for the purposes of seed, feed and chewing etc. are almost constant, about 12 per cent since the year 1976-77 to 1995-96. The utilisation of sugarcane for production of white sugar increased from 35.3 per cent in 1984-85 to 61.6 per cent in 1995-96 season and a phenomenal decrease in Gur and Khandsari production 52.4 to 26.5 per cent during the same season. A comparative statement showing the yearly utilisation of sugarcane since 1976-77 to 1995-96 is given in Table 3.2.

SUGARCANE PRICING POLICY

The Agriculture Prices Commission was set up in 1965 to advise the Government on the price policy for agricultural commodities including sugarcane. The Government of India did not revise the Statutory Minimum Prices (SMP) of sugarcane for the years 1980 to 1983. The price was marginally increased

by 50 paise per quintal in 1984. The commission in its earlier reports on policy for sugarcane had observed that the fixation of statutory minimum price at a level lower than that recommended by the Commission not only adversely affected the supply of sugarcane but also resulted in escalating demand for sugar. The CACP in its report had advised against the fixation of State Advised Prices (SAP) and had stated that the state government should not increase the level of state advised prices any further and gradually the system of state advised price be done away with. This suggestion of the commission however has not found favour with the state Government so far. In many states, the state advised price were fixed at levels in conformity with the price trends with other competing crops. In this way, Central Government fixes the sugarcane price for a sugar season on the advise of CACP, state government also declare for the same season which were always higher side, because of two main factors - one is price trends with other competing crops and other is political interference. Most of the time sugar factories pay higher than the state advised prices to the cane growers to attract them in the competition with Khandsari units, particularly in Uttar Pradesh, where those units are highest in number, in the country. Table 3.3 shows the sugarcane prices which were recommended by the commission, price fixed by the Central Government and actual average price paid by Uttar Pradesh Sugar Factories.

Table 3.3 : Minimum Sugarcane Price Recommended by CACP, Fixed by Central Government and Actual Cane Price Paid by the U.P. Sugar Factories (1976-77 to 1996-97)

(Rs. per quintal of cane)

Year/ Season	Price Recommended by CACP	Price Fixed by Central Government	Average Price Paid by U.P. Sugar Factories
1976-77	9.50	8.50	12.92
1977-78	9.50	8.50	13.17
1978-79	10.00	10.00	11.06
1979-80	10.00	12.50	14.75
1980-81	13.00	13.00	22.50
1981-82	15.50	13.00	21.00
1982-83	15.50	13.00	21.00
1983-84	16.00	13.50	21.00
1984-85	16.00	14.00	21.50
1985-86	16.50	16.50	22.00
1986-87	17.00	17.00	24.50
1987-88	18.50	18.50	25.00
1988-89	19.50	19.50	28.00
1989-90	22.00	22.00	39.50
1990-91	24.00	23.00	42.50
1991-92	26.00	26.00	46.50
1992-93	27.00	31.00	47.50
1993-94	36.50	34.50	59.50
1994-95	38.50	39.10	68.00
1995-96	42.50	42.50	72.00
1996-97	45.90	45.90	72.00

Source : Indian Sugar Year Book (1984-85 to 1996-97),
New Delhi.

CANE PRICE (1976-77 TO 1996-97)

The Government announced the statutory minimum price of Rs.24 per qtl. of sugarcane for the year 1991-92 linked to a basic recovery of 8.5 per cent on 7th November, 1990, against CACP recommended price of Rs.25 per qtl. Having regards to the change in various parametres, the CACP recommended an upward revision in the minimum price of sugarcane for the year 1991-92 at Rs.26 per quintal. Subsequent to the recommendation of the CACP the price of fertilizers increased steeply owing to de-control of fertilizer prices. Since then the government has announced higher prices for procurement of various agricultural commodities. The mills association had requested the CACP to recommend a price of Rs.30 per quintal for the year 1991-92 to ensure parity with other agricultural commodities. The Government revised the Statutory Minimum Prices (SMP) to Rs.26 per quintal based on the recommendation of the CACP. In the year 1992-93, government had initially announced the SMP at Rs.27 per quintal linked to 8.5 per cent recovery. The mills association again represented to the CACP to revise the SMP to Rs.34 per quintal for ensuring parity with other agricultural crops. It was February 1993 that the Government revised the SMP to Rs.31 per quintal linked to 8.5 per cent recovery.²

The government announced the statutory minimum prices at Rs.34.50, Rs.39.10, Rs.42.50 and Rs.45.90 per quintal linked

to a basic recovery of 8.5 per cent for the years 1993-94, 1994-95, 1995-96 and 1996-97 respectively. With the announcement of the Statutory Minimum Cane Prices (SMP), State Governments simultaneously announced high state advised prices (SAP), despite being urged repeatedly to refrain from announcing such cane prices as only the central government had the authority to fix the sugarcane price under the sugar control order 1966. The U.P. Sugar Mills Association accordingly represented this matter to the State Government that it would not be possible to pay such high state advised cane prices any more and subsequently filed a writ petition in the Allahabad High Court challenging the fixation of state advised cane prices. The Allahabad High Court by a land mark judgement dated 11 December, 1996, decided that the State Government had no power to fix the state advised prices for the cane under any status and quashed the order dated 15 November 1996, issued by the U.P. State Government fixing the state advised cane price at Rs.72 per quintal for the season 1996-97.³ Further, the court directed the Central Government to constitute a High Powered Committee to study the various aspects of the sugar industry and make recommendations to thoroughly revise the laws prevailing in India relating to sugar and sugarcane.

From the above it is clear that the production of sugarcane depends on acreage under the crop and the productivity of sugarcane per hectates, as well as, the weather conditions in our country. Although, there is an

upward trend in sugarcane production, area and yield since 1950-51 to 1996-97 but variation is also there from year to year. These variations effect the supply of sugarcane to the sugar industry. Another factor, which influences to the farmers towards the cash crop, is the fixation of sugarcane prices by the Government. If the prices are favourable to the farmers sugarcane acreage increases and leads to over production. This over production of the sugarcane crop may become a burden to the sugar mills to crush the crop upto the months May and June. This crushing, in hot months, is very uneconomical to the mills. So mills refuse to take such supply and farmers are bound to burn their sugarcane crop to clear their fields for another crops. For the next season farmers take interest in another comparative cash crops. This result low cane acreage and makes sugarcane supply to the sugar industry in a fluctuating manner.

Sugarcane has a great significance for the sugar industry, as it accounts 70 per cent of the cost of sugar production.⁴ As we have seen above that both the conditions of short and surplus supply of sugarcane to the sugar industry do not serve the purpose of the industry properly and leads ultimately to the losses. It is necessary for sugar industry to get sugarcane supply smoothly and regularly. Mehta, a renowned economist rightly says "take care of your agriculture and your industries will take care of themselves".⁵ But particularly in sugarcane crop, we

have not only to take care of our crop - also Government should be very careful at the time of price fixation of this crop because it impacts directly on the crop as well as industry. Government policy must be very sound in connection with price fixation of sugarcane crop. There should not be any political interference at the time of fixation of State advised cane price. Because sugar industry is realing under heavy losses on the one hand and the farmers are not paid for sugar crops for months and some time for years.

REFERENCES

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2. Indian Sugar Year Book (1995-96-97), New Delhi, Vol.I, pp.15-16.
3. Ibid.
4. R.C. Tyagi, 'Problems and Prospects of Sugar Industry in India' (1995), Mittal Publications, New Delhi, p.31.
5. J.K. Mehta, Economic Problems of Modern India, p.141.

CHAPTER IV

SUGAR INDUSTRY AND GOVERNMENT INTERVENTION

Sugar industry in India is said to be 'the child of protection'. This is for the obvious reason that before 1931, when it was granted protection, the position of this industry was not satisfactory. 'In 1929-30, there were only 29 vacuum pan sugar factories in india, producing 89,800 tonnes of sugar. The import of sugar in the same year was about one million tonnes and since the grant of protection in 1932, the modern sugar industry made phenomenal progress.'¹ In the post protection period both the number of sugar factories and its production rose. In 1943-44 the number of factories rose to 145 from 56 in 1932-33 and production to 291 lakh tonnes from 12 lakh tonnes during the same period. The Statutory Control on sugar was first imposed in April 1942, under the Sugar and Sugar Products Control Order, 1943. The Sugar Controller to the Government of India regulated production, distribution and prices of sugar.

GOVERNMENT POLICY FOR SUGAR MILLS

In order to ensure adequate supply of sugarcane to the large mills the Government has reserved an area of 16

kilometres around the sugar mill from which they are to purchase their suarcane. No other sugar mill can encroach into the reserve area of any particular unit. Within each reserve area there is a cooperative society and all the growers who wish to sell their sugarcane to the mill have to be registered with this society. The sugar mill then gives its day-to-day requirement details to the society which in turn selects the cultivators who are to supply the cane to the sugar mill. In this manner it tries to ensure that all the cultivators get their turn in rotation and without any inconvenience either to the cultivators or to the sugar mills.

As already been mentioned that Government also fixes a minimum cane procurement price every year to safeguard the interest of the cultivators. The payment for the cane supplied is made to the cultivators through the cooperative society and for this service the cooperative society charges them around 2 per cent by way of service charges. While the Central Government announces a procurement prices, of sugarcane, the State Government also announces its price for the state and these are always higher than those announced by the Central Government. The sugarcane procurement prices have been going up sharply. In 1976-77 the procurement prices announced by the central government was Rs.10.80 per quintal and the prices announced by the U.P. Government was Rs.13.25 per quintal for the same year. By 1996-97 these have gone upto Rs.55.02 per quintal in case by the Central

Government, whereas the corresponding prices announced by the U.P. Government was Rs.72.00 per quintal. Although, the prices of procurement increased six times, since 1976-77 to 1996-97 but the production rose three times for the same period of time. In U.P. sugar production rose from 14.71 lakh tonnes to 40.83 lakh tonnes (Table 4.1).

Table 4.1 : Number of Sugar Mills, Cane Crushed, Sugar Production in U.P. and Sugar Cane Prices Fixed by Central and U.P. Governments

Year	No. of Units in U.P.	Cane crushed (Lakh Tonnes)	Sugar Production (Lakh Tonnes)	Cane Prices Fixed By			
				Govt. of India		U.P. Govt.	
				Min.	Max.	Min.	Max.
1976-77	79	151.53	14.71	8.50	10.80	12.25	13.25
1977-78	85	205.44	18.62	8.00	11.00	12.50	13.50
1978-79	88	157.64	14.63	10.00	12.71	10.00	12.71
1979-80	89	102.03	9.97	12.50	16.03	12.87	22.00
1980-81	90	129.35	12.24	13.00	17.28	19.00	26.00
1981-82	91	227.85	20.80	13.00	16.52	20.50	21.50
1982-83	92	210.40	20.35	13.00	16.67	20.50	21.50
1983-84	94	185.14	17.27	13.00	18.90	20.50	21.50
1984-85	99	154.48	14.77	14.00	17.46	21.00	22.00
1985-86	101	172.17	16.48	16.00	20.58	23.00	24.00
1986-87	102	271.10	25.56	17.00	22.00	24.00	25.00
1987-88	104	299.65	26.66	18.00	24.10	26.00	27.00
1988-89	104	242.93	23.02	19.50	23.63	19.50	23.63
1989-90	105	332.98	30.08	22.00	28.99	22.00	28.99
1990-91	105	327.56	29.75	23.00	28.95	23.00	28.95
1991-92	106	397.55	36.51	26.00	32.12	26.00	32.12
1992-93	108	295.75	28.56	31.00	38.29	31.00	38.66
1993-94	110	289.89	27.15	34.50	43.84	34.50	43.84
1994-95	112	383.13	36.09	39.10	48.40	39.10	48.40
1995-96	117	502.50	43.78	42.50	53.30	42.50	53.30
1996-97	119	436.30	40.83	45.90	55.02	45.92	72.00

Source : Cane Commissioner's Office, Lucknow.

As far as sugar production and sugar consumption is concerned in Uttar Pradesh, it is to note that state is playing most important and vital role in sugar production, which is more than that of 25 per cent of total produce of the country (Table 2.1), but the sugar consumption in the state itself is less than half of the total sugar produced every year since 1976-77 to 1989-90 except in two years 1979-80 and 1984-85 due to unfavourable seasons for the sugarcane and low supply to the sugar mills. On the other side more than 50 per cent of the produce of the state is utilized in other parts of the country, i.e. inter-state export of sugar takes place from Uttar Pradesh (Table 4.2).

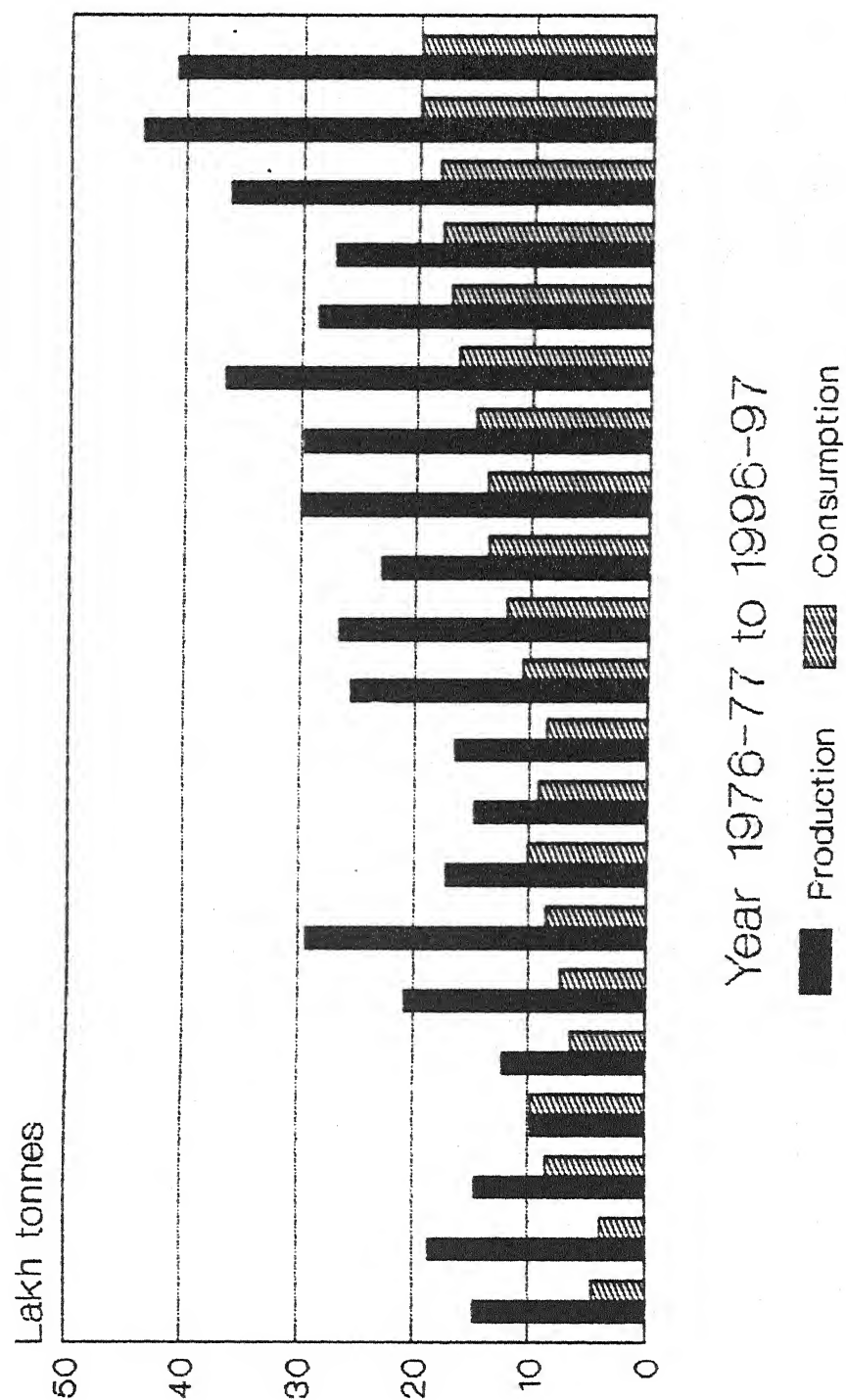
Also the graphical representation of the production and consumption of sugar in Uttar Pradesh shows an upward trend both in production and consumption (Graph I). In case of sugar production it shows that the production is increasing during the period 1984-85 to 1996-97, but in a fluctuating manner, whereas consumption is increasing regularly during the same period of time. But in all cases, all the time production is on higher side than that of consumption. However, we know that our sugar mills are using only 33 to 34 per cent of total produce of sugarcane in this state. This is because of few reasons such as most of sugar mills in U.P. state are quite old and sick, other is much Government interventions.

Table 4.2 : Production and Consumption of Sugar in U.P.

Year	Sugar Production (Lakh Tonnes)	Sugar Consumption (Lakh Tonnes)	Consumption outside the State or Surplus (Lakh Tonnes)
1976-77	14.71	4.54	10.17
1977-78	18.62	3.81	14.81
1978-79	14.63	8.49	6.14
1979-80	9.97	9.74	0.02
1980-81	12.24	6.36	5.88
1981-82	20.80	7.27	13.53
1982-83	20.35	8.52	20.83
1983-84	17.27	10.08	7.19
1984-85	14.77	9.15	5.55
1985-86	16.48	8.50	7.98
1986-87	25.56	10.62	14.58
1987-88	26.66	12.08	14.58
1988-89	23.02	13.70	9.32
1989-90	30.08	13.84	16.24
1990-91	29.75	14.87	14.88
1991-92	36.51	16.35	20.16
1992-93	28.56	17.05	11.51
1993-94	27.15	17.85	9.30
1994-95	36.09	18.20	17.89
1995-96	43.78	19.87	23.94
1996-97	40.83	19.95	20.88

Source : Cane and Sugar Commissioner's Office, Lucknow.

Production and Consumption of Sugar in U.P.



Graph-I

This industry has to work under the effective control of Government, such as, licence for the establishment of new sugar mill and for the extension of old mills, minimum statutory prices of sugarcane and the price fixed by the State Government, control on sugar production, release for finished products, sale and the price of the sugar. In recent years, controls have come under heavy attack as these are held responsible for the slow growth in the productivity and efficiency of Indian industry.

Industrial licence applications for the establishment of new sugar mills as well as expansion in the existing units were required to be submitted to the State Government for onward transmission to the Secretariat for Industrial Approvals in the Department of Industrial Development. The State Government while forwarding applications should send their recommendation along with cane availability position in the prescribed proforma and they may also certify that no sugar unit is licensed in the district in which the location of a new sugar factory is proposed.

The Government of India have reviewed the guidelines for licensing of new and expansion of existing sugar factories issues vide Ministry's Press Note No.16(1991) dated November 8, 1991.² The existing guidelines need revision in order to take into account the changes in the business scenario following economic liberalization, the need for introducing simplified and transparent procedures and the technological

changes that have been place in sugar industry. According to the guidelines, new sugar factories will continue to be licensed for a minimum economic capacity 2500 tonnes cane crushed per day (TCD). There will not be any maximum limit on such capacity. Preference in licensing would be given to the proposals involving large capacity, modern technology and development of integrated complexes producing value added products and co-generation of power. The distance between the proposed new sugar factory and an existing already licensed sugar factory should be not less than 15 kilometres. The basic criteria for grant of licences for new sugar units would be cane availability or the potential for the development of sugarcane or both. Other things being equal, preference in licensing will be given to the proposals from the Grower's Cooperative Societies. However, industrial licence issued to such a cooperative cannot be transferred to any other entity. All applications for expansion of the existing factories will be cleared automatically.

Although, Government is trying to relax in the conditions of issuing a licence to the new sugar mills but it is still require a bold step forward from the Government side to attract more entrepreneurs to establish new sugar mills in the country. Sugar industry must be relaxed from licensing immediately, while Government is very much reluctant in case of licensing for most of the industries in recent years.

In case of Uttar Pradesh, where the sugar mills are crushing only 1/3 of the total produce of is sugarcane and

the production of sugarcane is increasing every year, there is a big scope for new sugar mills. As far as existing units of sugar industry is concerned, in this state, most of the sugar mills are fairly old and are not working properly. These units should be rehabilitated and must be attained their crushing capacity upto the economic viability. Under the new policy formulated by the Government, it is considered that the optimum capacity is 2500 tonnes per day and that existing unit should be allowed to raise their capacity to this level, where the required additional quantities of sugarcane can be assured. In this connection, Government should provide soft loans to the sick units on the priority basis.

In order to achieve the sugar production upto the internal requirement and surplus (for export), Central Government controls and fixes the cane price. It also protect the interest of growers and ensure the supply to the sugar mills. Further State Governments again declare the State Advice Price (SAP) for the same season, generally higher side. This is because of two main reasons - first is the price trend with other cash crops in the concerning state, and second is the political. If State Advice Price is fixed reasonably higher because of other competitive crops, it may attract the growers and increase the cane production, with a regular supply and without affecting sugar mills but if it is because of political reasons it is most of the time harmful to the sugar mills. Government should be very careful while fixing sugar cane price. Practically there

should not be any political interference at the time of price fixation of this crop, because its affect fall directly on the cane crop as well as sugar industry. Regarding the Government Cane Price Policy, much has been already said in chapter third.

Government also control the price of sugar and it's release to the market on monthly basis. A dual pricing policy is working under the Government control. Dual pricing in sugar is an instrument for providing a certain quantity (a part of the ned) of sugar to urban consumers at an assured 'reasonable' price, through the public distribution system, allowing the mills to sell a portion of their output at a higher price in the free market. However, the free market is not really free, since the quantity of sugar offered is determined by quotas set by Government. For the year 1978-79, the Government reviewed the policy in the month of August 1978 and decided to decontrol sugar with effect from August 16, 1978. Simultaneously, the Government also withdrew the well conceived system of release of sugar which was never dispensed within the past, even during periods of decontrol. This decontrol policy of sugar was adopted by the Government in view to increase the consumption of sugar in order to balance the sugar economy. The effect of decontrol levy sugar was proved good enough, as production of sugar and the carry over stocks rises up during the period, but the consequence of decontrol of release of sugar from the mills to the market was proved very poor to the sugar mills. There

was cut throat competition among the factories and the sugar prices crashed through out the country to highly uneconomic levels.

With a large output, the carry-over stocks at the end of 1977-78 season reached an all-time record figure of 32.89 lakh tonnes. With the continuous decline in prices economic viability of the industry was seriously impaired and incapacitated its ability to maintain cane payments, wage payments and other obligations. Under such circumstances the industry in all the three sectors, namely, the Joint Stock Sector, the Public Sector and Co-operative Sector considered this matter and decided to enforce a scheme of voluntary control on sugar release with effect from March 1, 1979. This was a novel experiment without a parallel. It was only after this scheme was put into operation that the sugar price gradually tended to look up towards economic levels. However, the voluntary release system did not last long. On June 5, 1979, Government of India decided to regulate monthly release and the voluntary scheme automatically terminated as per provisions in the agreement.

Since 1978-79, Government never fully decontrol the sugar. However, the ratio of levy sugar and free sugar were changed like 65:35 in the year 1979-80, 55:45 in the year 1985-86, 50:50 in 1986-87, 45:55 in 1990-91 and 40:60 in 1992-93. This levy and free sugar ratio, 40:60 is still continuing. Government had never decontrolled the release of

sugar since 1978-79, considering this year as an experimental year.

In recent years, sugar situation is going on deteriorating in the country. India is going on importing sugar, even with a great controversy, with an argument to satisfy internal demand as well as to regulate the sugar price. This imported sugar, adversely affecting sugar industry and country's economy. Country is loosing foreign currency by one hand and sugar industry is facing crisis on the other, because industry has to compete with the price of imported sugar. So industry has checked its production instead of improving the production to satisfy internal demand. It is badly affecting to our cane growers, because sugar mills started refusing to take sugarcane for further crushing. Although, India is having almost all the important basic potentials like raw material (sugar cane in surplus), abandoned labour and land for the industry, etc. for the development of this industry and for improving of production within the country. Now question is why we are importing sugar? It may be for the reason one or other - but one of the major reason is Government sugar policy, which needs a positive change.

SAMPLE SUGAR MILLS OF UTTAR PRADESH

Two sugar mills have been taken as a sample sugar mill from District Bijnor, U.P. for the study. One is Dhampur

Sugar Mills, which is in private sector and production wise, one of the leading sugar mills in the country. Other is Chandpur Sugar Mills, which is in Corporation Limited sector, under U.P. State Government. It has been found that both the sugar mills have worked less duration in the season 1997-98 as compared to the season 1996-97, resulting less cane crushed and low sugar production. Table 4.3 depicts the fact that sugar production of the both sugar mills were lesser in season 1997-98 as compared to last season 1996-97, because both mills had stopped their crushing, two weeks earlier than the previous season. The figure of time account also shows (Table 4.3) that total hours lost in the production process were lesser (152.97 hours) in 1997-98 season as compared to 1996-97 season in Dhampur Sugar Mills but it was slight higher (64 hours) in Chandpur Sugar Mills. This hours lost in Chandpur Sugar Mills was due to labour problem which was not in the last season. Another important thing emerges from the table 4.3, is the hours lost due to the shortage of cane, increases in this season 1997-98 in comparison with the season 1996-97.

The short supply of cane to the sugar mills is not always because of low cane crop but it may be due to the cane diversion to another sweetener units, like Gur and Khandsari units. Sometimes these khandsari units pay higher price than the large sugar mills to attract cane growers. As soon as cane supply started diverting from sugar mills to these units and becomes sufficient, they control the cane price by

Table 4.3 : Particulars About Cane Crushed and Sugar Production in Two Sample Sugar Mills of U.P. for the Years 1996-97 & 1997-98

Particulars	Dhampur Sugar Mills (Pvt.Ltd.)		Chandpur Sugar Mills (UP State Corpn.Ltd.)	
	Season 1997-98	Season 1996-97	Season 1997-98	Season 1996-97
<u>Time Account</u>				
Date of Start	17.11.97	29.11.96	22.11.97	22.11.96
Date of finish	30.04.98	27.05.97	25.04.98	16.05.97
Total hrs. actual crushing	3205.44	3417.37	3283.00	3863.00
Total hours lost	747.46	900.43	401.00	337.00
(a) Cane Shortage	277.55	136.49	98.30	58.00
(b) Mechanical	279.01	318.49	93.15	131.00
(c) Process	Nil	2.32	Nil	Nil
(d) Miscellaneous	190.50	442.42	33.15	35.30
(e) General Cleaning	-	-	126.00	112.30
(f) Labour Trouble	-	-	52.00	-
(g) Grower's Trouble	-	-	-	-
<u>Cane Crushed</u>				
(a) Own Estate Cane (Qtls)	85483.32	65671.76	389.49	253.59
(b) Gate Cane (Qtls)	383062.42	4144776.33	1459595.41	1454984.64
(c) Outstation Cane-Rail	Nil	Nil	Nil	Nil
(d) Other than Rail Cane	9596263.57	9671755.49	1893676.27	1967824.78
Total (Qtls.)	13512375.31	13882263.58	3353660.17	3423063.01
<u>Sugar : Total Sugar Bagged :</u>				
(a) No. of Bags (White & Brown)	1306500	1380220	319225	324210
(b) Qty.(White & Brown)(Ton)	130650	138022	31922.5	32421
(c) Total Sugar Made (Tons)	130650	138022	31966.3	32455.6
(d) Total Net Sugar Made (T)	130472.31	137669.44	31515.5	32029.8
<u>Recovery</u>				
(a) Average recovery of Sugar (%) Cane	9.66	9.92	9.40	9.36
(b) Avg. Prodn. of Final Molasses (%) Cane	4.76	4.45	4.79	5.49
<u>Established Crushing Capacity (TDC)</u>				
	10,000	10,000	4000	4000

Source : Final Manufacturing Report, 1997-98.

offering lower price for the cane to the growers in the same season. But sugar mills cannot adopt this practice as they have to work under the certain norms, control by the Government. This diversion of cane adversely affects the sugar mills and their production. This very problem is the special feature of UP State, because the highest number of khandsari units are located in this state in the country. At the time of field survey authorities of the both mills narrated this problem. This usually creates cane shortage for the sugar mills and mills lost hours in crushing.

GOVERNMENT POLICY FOR KHANDSARI UNITS

The process of producing khandsari has developed from a very primitive technology. Between 1936 and 1948 the Gur and Khandsari scheme of Bilsari was instrumental in developing a new process known as the 'Open Pan Sulphitation' (OPS). This process not only improved the sugar recovery but also the quality of traditional khandsari sugar. The technology employed is a simple version of the chemical processes in the sugar mill, but with some characteristics of the khandsari sugar cottage industry. In favourable circumstances the sugar produced in small units is of the same technical standard, in the terms of colour, size and dryness of the crystals as average mill sugar, although it is more generally not quite upto that standard. C.G. Baron⁴ elaborated that the distinction between mill sugar and OPS sugar was one to

be drawn only by a specialist. A technologist at the National Federation of Cooperative Sugar Factories agreed that some of the OPS sugar was 'very good'. The extent to which OPS sugar deviates from the best standards of white, hard dry crystals is certainly dependent upon the diligence and skill of the supervisors in the small scale units, which vary. In the mills, on the other hand, the chemical processes - boiling times and temperatures, etc. are well known and documented. Government also instituted a research scheme for improving the efficiency of khandsari units and then these units also started producing white crystal sugar by adding sulphitation technique in khandsari. Although even today not all khandsari units are sulphitation units.

Table 4.4 shows, the total number of khandsari units from the year 1975-76 to 1997-98. This table gives the number of licensed units and working units of khandsari, yearwise, as well as sulphur and non-sulphur units in both the conditions in Uttar Pradesh. Table 4.5, which can be treated as supplementary table to Table 4.4 furnished more information regarding the Khandsari units of U.P. like - cane crushed, khandsari production, price of cane. It is quite interesting to note that despite the fact that the total number of khandsari units showing a declining trend but the total quantum of sugarcane crushed has increased over the years. Between 1974-75 and 1996-97, the number of khandsari units were reduced to less than half, but the total quantity of sugarcane crushed increased more than double and

Table 4.4 : Sulphur and Non-Sulphur Units of Khandsari in U.P.

Year	Licensed Units			Working Units		
	Sulphur	Non-Sulphur	Total	Sulphur	Non-Sulphur	Total
1975-76	1219	2858	4077	1038	2462	3500
1976-77	1189	2265	3450	1033	2103	3136
1977-78	1420	2686	4106	1075	1884	2959
1978-79	1106	2069	3175	812	1597	2409
1979-80	882	1857	2739	769	1551	2320
1980-81	1010	1856	2875	944	1692	2636
1981-82	997	1816	2813	943	1548	2501
1982-83	1039	1722	2761	883	1301	2184
1983-84	905	1469	2374	830	1211	2041
1984-85	818	1259	2077	726	1082	1801
1985-86	777	1163	1940	713	1031	1744
1986-87	746	1128	1874	714	1053	1767
1987-88	N.A.	N.A.	1815	N.A.	N.A.	1666
1988-89	N.A.	N.A.	1744	N.A.	N.A.	1600
1989-90	647	996	1643	627	925	1552
1990-91	628	934	1562	606	833	1439
1991-92	588	891	1479	548	759	1307
1992-93	516	780	1296	498	683	1181
1993-94	479	795	1274	463	748	1211
1994-95	483	786	1268	469	722	1191
1995-96	445	767	1212	412	670	1082
1996-97	414	735	1149	394	646	1040
1997-98*	393	705	1098	370	641	1011

* Upto March 31, 1998.

Source : Cane and Sugar Commissioner's Office, Lucknow.

production of khandsari sugar has increased about three-times (See Table 4.5). This is possibly so because despite the problems of the khandsari sector, those who have survived are more efficient units. They have increased their crushing capacity by increasing the total daily crushing time and by increasing the size and number of crushers. They have also adopted new technological measures. Graph II shows declining trend of khandsari units between 1974-75 to 1996-97 in U.P. and Graph III shows an increasing trend in production of khandsari in these units during the same period of time.

Khandsari units are having the great advantage of taxation from Government side, either they are almost free from taxes or are paying very nominal tax as compared to big sugar mills. A nominal excise duty at the rate of 50 paise per quintal was levied on Khandsari with effect from March 1, 1932, but same was withdrawn from July, 1952. Khandsari sugar was thus, free from payment of any excise duty since then. After the doubling of excise duty on crystal sugar from Rs.11.06 to Rs.22.15 per quintal on May 6, 1953, the parity in taxation that existed between crystal sugar on the one hand and khandsari on the other was completely lost. This placed the khandsari at a very great advantage for attracting cane from factory areas, though payment of higher cane prices specially in the year of cane shortage.⁵

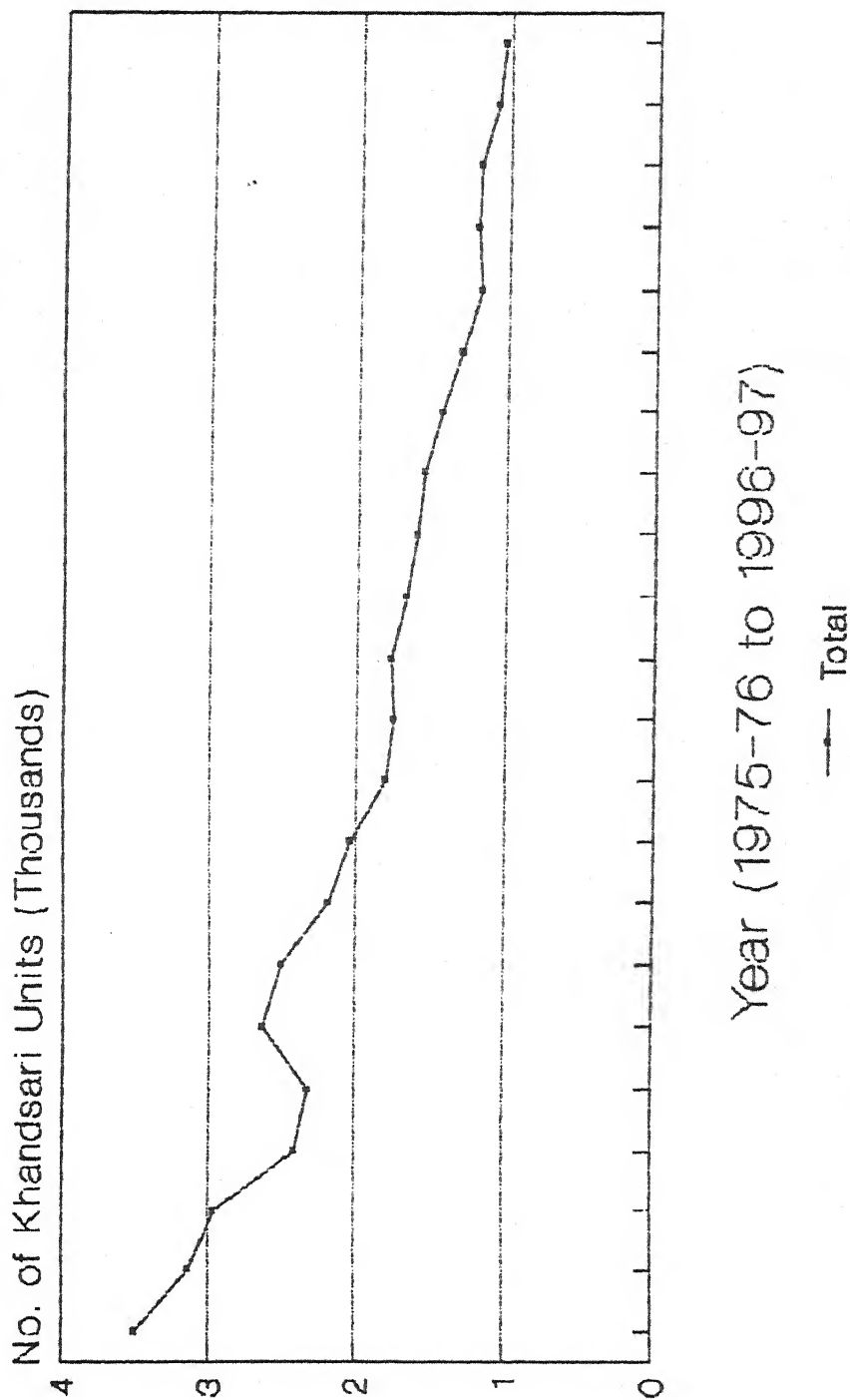
Table 4.5 : Data Relating to Khandsari Units of U.P.

Year	Licensed Units	Working Units	Cane Crushed (Lakh Qtl.)	Khandsari Production (Lakh Qtl)	Price of Cane per Quintal (Rs.)	
					Minimum	Maximum
1975-76	4077	3500	550.20	23.06	8.00	18.00
1976-77	3450	3136	671.07	27.51	8.00	18.00
1977-78	4106	2959	1056.18	45.89	8.00	18.00
1978-79	3175	2409	562.99	25.06	9.00	20.00
1979-80	2739	2320	555.56	24.77	9.00	20.00
1980-81	2875	2636	805.62	33.09	10.00	22.00
1981-82	2813	2501	901.48	45.25	10.00	22.00
1982-83	2761	2184	972.72	48.01	8.00	25.00
1983-84	2374	2041	909.97	39.42	8.00	21.00
1984-85	2077	1801	828.81	39.00	10.00	30.00
1985-86	1940	1744	1021.27	48.00	13.00	33.00
1986-87	1874	1767	1283.24	66.35	10.00	33.00
1987-88	1815	1666	1254.54	53.05	10.00	29.00
1988-89	1744	1600	1199.33	51.04	15.00	40.00
1989-90	1643	1552	1129.46	51.25	18.00	48.00
1990-91	1562	1439	1335.09	53.87	18.00	48.00
1991-92	1479	1307	1439.44	65.19	18.00	42.00
1992-93	1296	1181	1225.02	52.87	28.00	60.50
1993-94	1274	1211	1407.62	57.79	40.00	80.00
1994-95	1268	1191	1449.65	64.31	30.00	70.00
1995-96	1212	1082	1287.19	57.21	25.00	60.00
1996-97	1149	1040	1351.98	60.31	20.00	73.00
1997-98*	1098	1011	830.93	34.15	37.00	85.00

* Upto March 31, 1998.

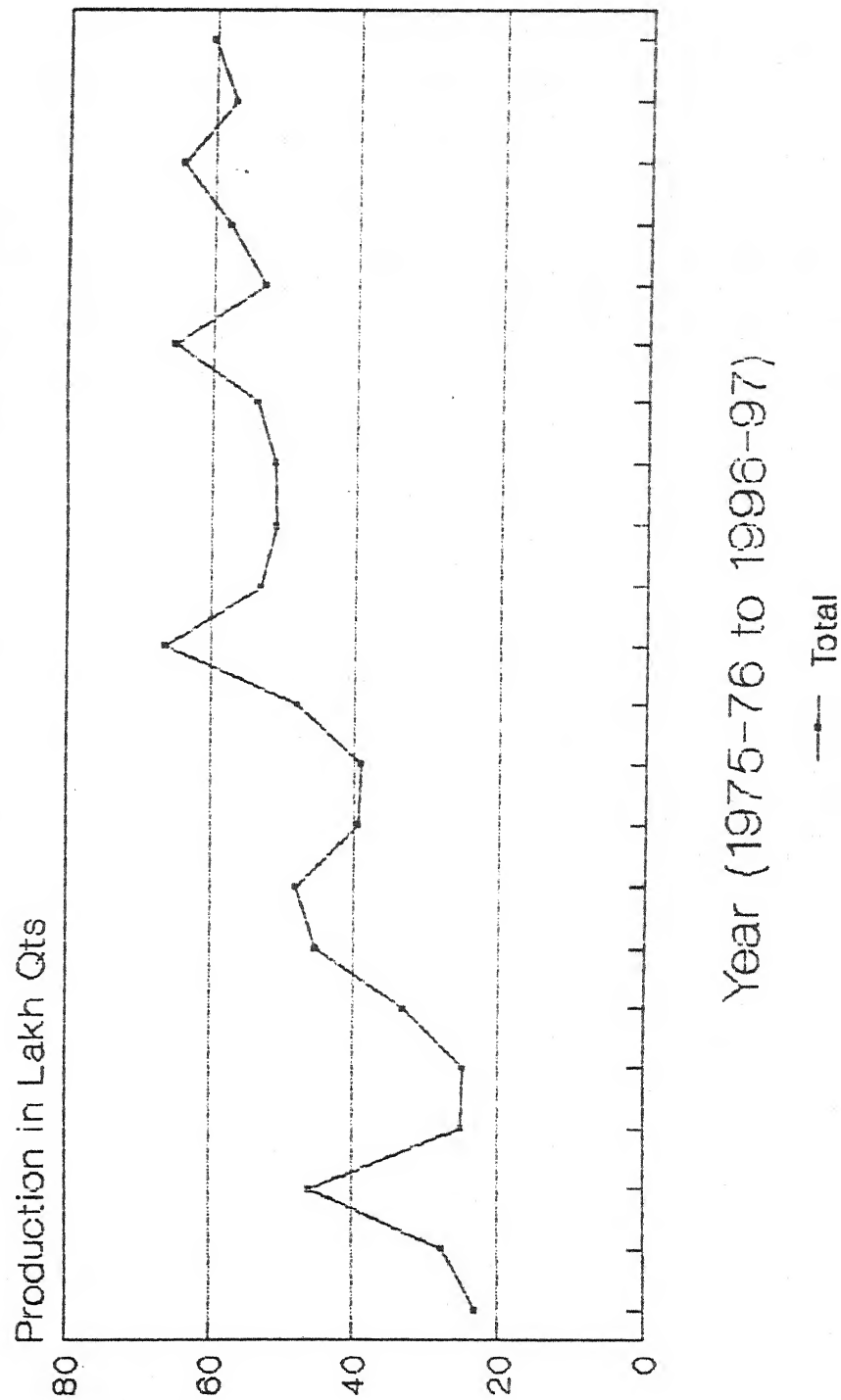
Source : Cane and Sugar Commissioner's Office, Lucknow.

Number of Working Khandsari units in U.P. (1975-76 to 1996-97)



Graph-II

Production of Khandsari Sugar in U.P. (1975-76 to 1996-97)



Graph-III

Again after a long interval of time Government realizes to impose some excise duty on khandsari sector. An excise duty at the rate of Rs.5.60 per quintal was levied in the budget for 1959-60, presented by the Union Finance Minister, besides an additional excise duty of Rs.3.31 in replacement of sales tax. As a matter of fact this excise duty was not fair for those khandsari units, not using sulphitation plant and making inferior quality of sugar. It was again a discriminating policy of taxation by the Government within the khandsari sector. However, one representation made by the khandsari sector, on April 20, 1965, khandsari sugar was divided into two categories : (i) khandsari sugar produced with the aid of sulphitation; and (ii) khandsari sugar produced without the aid of sulphitation. The basic excise duty on sulphitation khandsari sugar was levied by a separate notification at Rs.5.05 per quintal and the additional duty at Rs.0.63 per quintal. These excise duty on non-sulphur khandsari was Rs.4.41 per quintal. The effective rate of additional duty from the above rate was however, Rs.1.24 per quintal for sulphitation units and for non-sulphitation units at 96 paise per quintal. This rate continued upto March 1, 1966, when the tariff rate of excise duty on khandsari was increased from Rs.11.14 to Rs.15.24 per quintal. From November 15, 1969 the sulphitation khandsari were required to pay to total excise at Rs.21.50 per quintal, while non-sulphitation khandsari were required to pay the basic excise

duty of Rs.15 plus Rs.2.50 as additional excise duty, i.e. a total of Rs.17.50 per quintal.

From March 1, 1969, the basis for levy of excise duty on crystal sugar as also on khandsari had been changed from per quintal rate to advalorem, the tariff rate of duty on khandsari was fixed at 10 per cent advalorem for basic duty and 4 per cent advalorem for additional duty in replacement of sales tax. However, the effective rate was 10 per cent advalorem for basic duty and 2.5 per cent advalorem for additional duty on both the khandsari sugar produced with aid of sulphitation plant and without the aid of sulphitation plant. Effective from March 1, 1970, the tariff rate of duty on khandsari sugar was 15 per cent advalorem for basic duty and 7 per cent advalorem for additional duty in replacement of sales tax. The basic effective rate of duty on khandsari was also 15 per cent advalorem while the effective rate of additional excise duty continued to be only 2.5 per cent advalorem as before.

Apart from the above, the Government had also notified a separate compound rate of excise duty in respect of khandsari units working with or without the aid of sulphitation plants based on the number of centrifugals employed. On February 4, 1978, the basic duty under the normal procedure levied on khandsari was reduced from 15 per cent to 7 per cent. In respect of non-sulphur khandsari, the reduction in duty was of the order of 25 per cent against 50 per cent in case of sulphur khandsari.

Apart from excise duty, the khandsari in U.P. were required to pay purchase tax on cane purchased by them. Prior to 1967-68, the rate of purchase tax was 50 paise per quintal of sugarcane in case same was purchased from area within a radius of 10 miles from the vacuum pan sugar factories and in respect of sugarcane purchased beyond 10 miles, tax was at the rate of 25 paise per quintal. However, during the season 1967-68 the purchase tax had been levied by the U.P. Government at a uniform rate of 50 paise per quintal regardless of the distance of the area from which the sugar cane was purchased. The same rate continued in 1968-69 season also. In view of the glut of sugarcane in 1969-70, the State Government of U.P. had exempted cane meant for khandsari manufacture from the levy of purchase tax. However, in the years 1970-71, 1972-73, 1973-74, 1974-75 and 1979-80 State Government of U.P. had again reimposed cane cess on cane purchased by khandsari.

The Government of India by a notification dated July 29, 1990, issued by the Department of Food imposed certain restrictions on sale and despatch of khandsari sugar. As per the order, every producer of khandsari was required to declare his opening stocks as on July 31, 1988 and also the quantity produced in each month thereafter till September 30, 1988. Further, they were required to sell and despatch the stocks as on July 31, 1988 together with those produced after July 31 and upto September 30, 1988 latest by October 31,

1988 in the manner that not less than 40 per cent of the opening stocks as on July 31, 1988, during the month of August 1988 and not less than 40 per cent of the opening stocks as on the September 1, 1988, during the month of September, 1988. A similar notification was issued during 1989-90 and 1990-91 season as well. So far as gur is concerned it is completely exempted from any taxation. In few states. It is subjected to very nominal rate of sales tax.

Government also control some of the by-products of the sugar mills and khandsari units by imposing excise duty on them. The major by-products of this industry are - Molasses, Bagasse and Pressmud or Press cake. Molasses is the main by-product in the manufacturing of sugar. Molasses was classified under the taxable item and subjected to a duty of 8 per cent advalorem till the Union budget of 1980-81.

EXCISE DUTY ON MOLASSES⁶

The sugar factory molasses in the budget proposals for 1980-81 were re-classified under the new tariff and subjected to a fixed excise duty of Rs.30 per tonne and surcharge at the rate of 5 per cent. With effect from October 1, 1987 the excise duty on molasses was raised to Rs.60 per tonne. Government further increased the duty on sugar factory molasses from Rs.60 per tonne to Rs.120 per tonne. The excise duty on molasses was raised to Rs.150 per tonne in

1990-91 and Rs.175 per tonne in 1991-92 and Rs.200 per tonne in 1992-93. In the budget for 1994-95 the excise duty on molasses was converted into an advalorem rate of duty at the rate of 20 per cent. The khandsari molasses however, continue to be exempted.

In the budget for 1997-98, molasses was subject to a steep increase in excise duty, from the existing rate of 20 per cent advalorem the duty was increased to Rs.500 per tonne on the sole consideration that molasses is principally used for production of liquor. A similar excise duty was also levied on khandsari molasses. This was a welcome step to maintain some parity between sugar mills and khandsari units. However, the mode of payment of duty has been shifted from the khandsari units to the purchasing distillaries. Further, excise duty on khandsari molasses is exempted so long as it is used for any other purpose except distillation.

It is clear from the above that sugar industry is working under the complete control of Central and State Governments. Almost each and every department of this industry, i.e. since installation of mill, purchase of raw material to finished product and by-products are under the effective control of Government. Sugar, gradually became the item of mass consumption. Any fluctuation in the production of sugar and its price, effects not only to the consumers but also effects the economy as a whole. Its low production causes th severe effect on internal demand, resulting import of sugar by which country looses foreign currency an effects

the economy. Since we do have plenty of sugarcane and abandoned of labour, we can improve our production and can first satisfy our internal demand. For example in the state of U.P., our sugar mills are crushing only 33 per cent of the total produce of its sugarcane. Even then, sugar industry in the recent years passing through crisis. At this juncture it is necessary for the Government to make a sound sugar policy.

As far as khandsari units are concerned they have achieved highest level of improvement by adopting new technology of open pan sulphitation. Those could not do so, they vanished in course of time (See Table 4.4). Under the process of development, those khandsari units are still not having sulphitation plant are trying to install open pan sulphitation technology and those units are having sulphitation plant in OPS are working extremely well, and are now in position to adopt vacuum pan technology. But they can not convert their OPS plant into VPS plant without the permission (Licence) from the Government side. In this case Government should permit them to adopt VPS technology so that they can save the waste of sugarcane and will be able to serve national interest.

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CHAPTER V

SUMMARY AND CONCLUSIONS

It is evidently true that India is the home of sugar and sugarcane. One can find references in the ancient and pre-historic literature such as the Vedas. The Vacuum Pan Sulphitation (VPS) method in India may be said to have started with adoption of a policy of discriminating protection by the Colonial Government in 1932. Statutory control on sugar was first imposed in April 1942, under the sugar and sugar products control order, 1943. The Sugar Controller to the Government of India regulated production, distribution and prices of sugar. With effect from May 1, 1942, no sugar factory was permitted to effect sales of sugar to persons other than those authorised by the Sugar Controller. Allocations of monthly quota of sugar to be delivered by U.P. and Bihar factories to other state were made by the sugar controller.

Sugar, gradually became the item of mass consumption and sugar industry came under the complete control of central and state governments. Almost each and every departments of this industry, since installation of mill, purchase of raw material to finished product and by-products, release of sugar to the market, levy and free sale quota, import and export of sugar are under the effective control of

Government. According to Industries Development and Regulation Act 1951, it became incumbent on each entrepreneur to take a licence from the Government of India both for establishment of new sugar factories and expansion of the daily cane crushing capacity of the existing sugar factories.

The Central Government fixes the support price of sugarcane every year. The State Governments usually refix this support price by making further enhancement on the plea of providing remunerative price of sugarcane growers. Political interference also rose in this industry, because the product of this industry now became the item of mass consumption and raw material comes from the rural area. The combined impact of these interventions results into more losses than gains at national level and plung the industry into crisis.

In sugar industry, sugarcane plays an important role. The cost of sugarcane accounts for about 70 per cent of the cost of sugar production. It is necessary that adequate quantity and good quality of sugarcane is supplied to the mills on a regular basis. In the years of surplus supply, the position of sugar factory becomes a bit odd, because they are compelled both by the Government and cane growers to prolong their crushing season, often during the summer heat. With the result that the recovery falls down to the minimum, putting the industry to a loss. On the other side, during the season of short cane supply, the problem of sugar

factories is aggravated more. The Gur and Khandsari, being free from control, become the harder contestants for the cane supply.

The interest of growers of sugarcane, which is a common input for all the sweeteners, is to obtain a high price for their produce. This is clear enough, but it is also backed up by economic arguments, such as rising input costs, inflation in general and parity with industrial prices. Further, if the recovery of sugar from sugarcane is approximately taken to be 10 per cent the cost of sugar to mills worked out at around 13 times the price paid by them for sugarcane. What it suggests is that increases in cane prices have a tendency to raise the cost of production of sugar manifold. That is why, Government policy must be very sound in connection with price fixation of sugarcane crop. There should not be any political interference at the time of fixation of state advised cane price.

Whenever the percentage use of sugarcane increased in sugar mills for the production of white sugar the percentage of sugarcane use decreases in production of Gur and Khandsari. During the year when sugarcane crop was poor and lesser supply to sugarmills, the percentage use of sugarcane increased in the manufacturing of Gur and Khandsari. Such as, percentage use of sugarcane was 48.8 per cent in Gur and Khandsari in the year of normal crop season 1978-79 and 39.4 per cent was in sugar mills. It was as high as 58.0 per cent utilization of sugarcane in Gur and Khandsari units and

decreases use of sugarcane in mills to 30.3 per cent in the low crop season 1969-80 (see Ch.III, Table 3.2). This is because of Government Policy, which have a complete control on sugar mills and a very minimum in case of Gur and Khandsari.

Regarding Khandsari units, these are supplementary units at the time of good sugarcane crop for the sugar mills but competitive units at the time of poor sugarcane crop. These units having a great advantage of taxation from Government side, either they are free from taxes or are paying very nominal taxes as compared to big mills. This parity in taxation, placed the Khandsari units at a very great advantage for attracting cane from factory areas, though payment of higher cane prices, specially in the year of cane shortage. Regarding the performance and number of these units, it is interesting that the total number of units, between 1974-75 and 1996-97, were reduced to less than half, but the total quantity of sugarcane crushed increased more than double and production of Khandsari sugar has increased about three times (See Ch.IV, Table 4.5). This is because, despite the problems of khandsari sector, those who have survived, are more efficient units and adopted new technological measures. Most of them are in such advance stage that they should be permitted by the Government to install Vacuum Pan Technology instead of Open Pan.

Government also control the price of sugar by its release to the market. Again, Government's dual pricing

policy, which is an instrument for providing a certain quantity (a part of the need) of sugar, mostly to urban consumers at an assured 'reasonable' price, through the public distributing system, allowing the mills to sell a portion of their output at a higher price in the free market. However, the free market is not really free, since the quantity of sugar offered is determined by quotas set by Government. The Government acquires from the mills, the sugar needed for the public distribution system. The price of levy sugar is supposed to just cover the cost of sugar. Thus, if no profits are made by the mills on this portion of their sales, no losses are made either. The sugar mills are supposed to make their entire profits on the free market quotas allotted to them.

Considering the importance of the consumer price index, Government take steps to protect the urban consumers, who tend to link their wage demands to the price index. But Government's dual pricing policy is a burden for the sugar mills and is not providing full quota of requirement, even to the urban consumers. Then mills try to sell free market sugar, on a very high price to compensate their profits of levy sugar. In this dual pricing policy, neither consumers are benefited because they have to buy sugar from the open market at a very high price to meet their full requirement, nor sugar mills are interested to sell their product (a part) at a zero per cent profit.

In recent years, sugar situation is deteriorating in the country because of the Government's import policy. Indian Government is going on importing sugar, even with a great controversy, with an argument to satisfy internal demand as well as to regulate the sugar price. The central government recently put the sugar under Open General Licence (OGL) at 5 per cent custom duty and allowed import of it at Rs.850 per quintal. Because of its low rate of excise duty, this is a dirt cheap sugar than the internal sugar. This imported sugar is breaking the price of internal sugar, upto highly uneconomic level. Particularly U.P., being one of the leading sugar producing states in the country, is effecting badly with the Central Government decision to import sugar on such a low rate of excise duty. U.P. sugar mills could not compete with the price of imported sugar and they had stopped their production earlier than normal duration, during 1997-98 season. Sugar mills started refusing to take sugarcane for further crushing. Resulting imbalance of payment and accumulation of arrears.

It is clear, on the basis of the previous chapters and above summary, that the crisis in the sugar industry prevails mainly because of Government interventions in the form of poor post harvest processing technologies, poor sugarcane and sugar policy, much Government intervention and over political interference. At this juncture the study suggests the following policy recommendations.

SUGGESTIONS AND POLICY RECOMMENDATIONS

In the mixed economy of the country's all sectors, namely, Co-operative, private and public are national assets. Sugar industry is working in all these sectors. In recent years, crisis in sugar industry has been reached upto the alarming stage. So it is necessary that the Central Government and State Government should tackle the alarming situations of the industry particularly in Uttar Pradesh, where highest number of sugar mill are located. Government should adopt a national and appropriate sugar policy, so as to save it from further deterioration, without any bias or discrimination resulting in greater harmony and coherence amongsts all these sectors. A scientific method of fixing the price of cane should be adopted.

Demand of sugar is increasing in the country due to the high rate of population growth, urbanization, increase in income and other related factors but production is low as compared to demand. In this situation, Government should try to give more thrust on more use of sugarcane crop in the sugar mills for more sugar production. This is much required in Uttar Pradesh where only 33 per cent of the total produce of sugarcane in the state is under the use of sugar mills. It can be done by the expansion and increase in crushing capacity of existing sugar mills and by issuing licences for new sugar mills. It will check the import of sugar and country will save the foreign currency. Simultaneously, a

long term export policy will also help the sugar industry to get itself guarded to international standards. The industry deserves no doubt support to keep itself viable and in good health in view of its great economic significance. Government should permit expansion on planned and phased basis of licence or restriction. This would render the plant economic and capable of speedier implementation by the Government. A long term sugar policy must be furnished by the Government so that it may be attuned to the needs of the development of sugarcane and sugar industry in the country with preferential treatment to sick sugar units. It would be very effective particularly for U.P., where number of sick sugar units are higher.

As far as Khandsari units are concerned, they are mostly concentrated in U.P. and most of them already attained the best technological improvements in Open Pan Sulphitation (OPS) and are knocking for the Vacuum Pan Sulphitation (VPS) technology. In this connection Government should provide licences to these khandsari units to install VPS technology. This will improve the production of sugar and revenue for the Government on the one hand and will check the wastage of cane - which is a great national loss as well as competition between VPS and OPS on the other.

In recent years, India is going on importing sugar, even with a great controversy, with an argument to satisfy internal demand as well as to regulate the sugar price. This sugar is a low cost sugar because the excise duty on this

sugar is very low. This sugar is creating the problem for sugar mills. In this regard Government should increase excise duty so that our sugar industry may compete with the price of imported sugar.

Thus, the current all India sugar scenario is anything but bright. Government should take above measures in the policy, which should be in long term. Government import and export policy must be very sound and efforts must be made to bridge the gap between production and consumption also to control sugar price vis-a-vis to see a genuine profit of sugar industry and cane grovers and try to avoid the situation as the consumers are free to pay higher prices while the sugar industry is reeling under heavy losses besides, the farmers are not paid for sugar crops for months and some times for years.

CONCLUSIONS

Study concludes that sugar industry has a great potential to outdo it's crisis, which is mainly because of lack of a sound sugar policy. It is necessary for the Government to frame such a sugar policy, which invites the entrepreneurs to install new sugar mills particularly in the state like U.P., where only 33 per cent of the total produce of its sugarcane is used in the sugar mills. For old sugar mills Government should permit to increase their crushing capacity. For this, the process of licencing must be very

simple. Government should also give the licences to install VPS technology to those improved DPS units, those are seeking for the same. Government sugarcane price policy must be very practical and sugarcane price should be fixed without any political interference. Government should make a provision in the sugar policy to provide soft loans to the sick units on the priority basis. The levy and free sugar ratio, 40:60 is still continuing since 1990-91. This dual price policy should be stopped and industry should be free to sale their sugar in the free market but the release of monthly sugar from the mill must be under the control of government. Government should discourage the import of sugar by imposing high rate of excise duty on the imported sugar and should be encouraged every possibility to crush more sugarcane by relaxing in licensing for installation of new mills and expansion in the old sugar mills.